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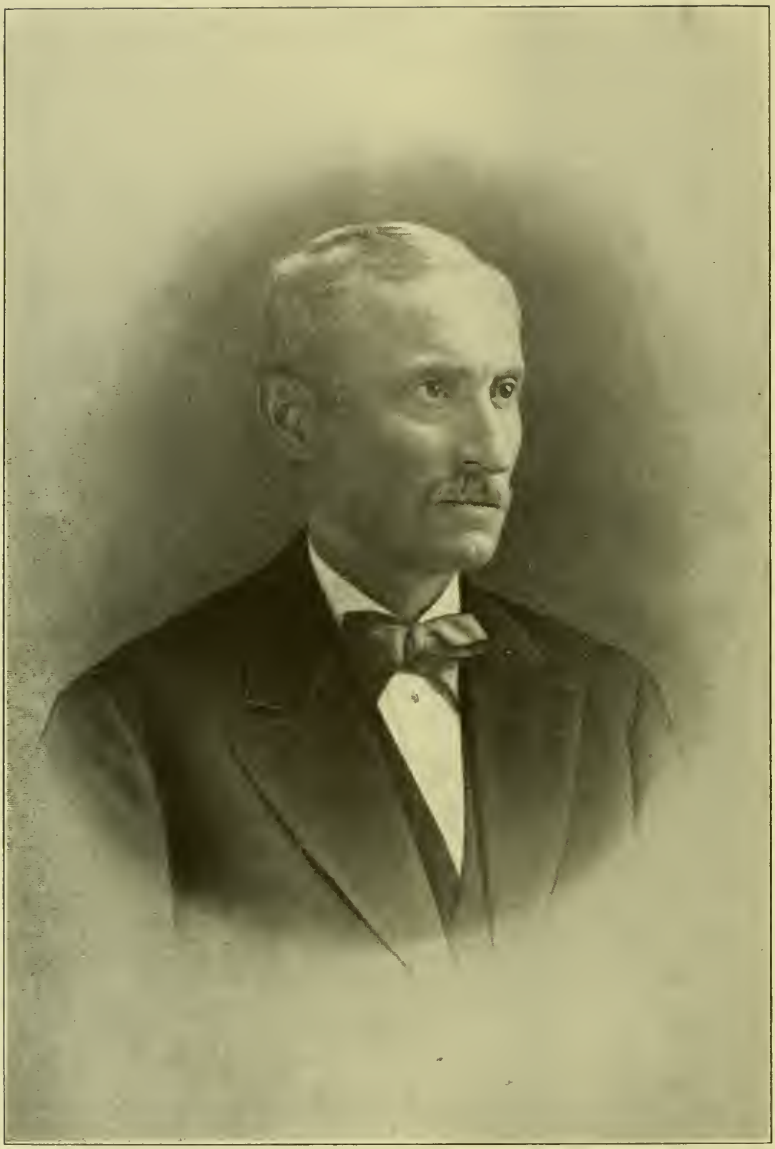

Captain W. A. Blair

Aetat 54

A RAFT PILOT'S LOG

A History of the Great Rafting Industry on the Upper Mississippi 1840-1915

by

WALTER A. BLAIR
Master and Pilot of the "Ten Broeck"

The Arthur H. Clark Company
Cleveland, U.S.A. 1930

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President Van Sant and Musser Transportation Company, and LeClaire Navigation Company.

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Especially prepared by Max Mayer to illustrate this volume.

Introduction

To make my story more intelligible to readers not acquainted with rafting or steamboating, I will explain some of the terms and expressions used frequently in our daily work:

To keep a raft-boat going on steadily required a double crew; that is, two pilots, two engineers, two or four firemen according to the size of the boat, two ash haulers and two watchmen or "Nigger-runners." Half of these are "on watch" (on duty) at a time and the other are "off watch."

On a few boats they stand straight six-hour watches changing at breakfast time, dinner and supper time, and at midnight or 1 A.M., but on most boats they stand the "Dog watch" in which they divide the day in two and the night into three watches changing after breakfast, dinner and supper as usual but at 11 P.M. and 3 A.M. or at midnight and 4 A.M.

To "call the watch" means to wake up the other pilot, engineer and firemen who are to go on duty. This is the pleasant part of the watchman's life. The mate on raft-boats and his crew on deck do not stand any regular watch. They are called up when needed. They often get "all night in" but sometimes they strike what is called a "Dutch watch" which means "twenty-four hours and come on again."

The men in the deck crew are entered in the Portage Book as Seamen but in practice are called Roosters, Rousters, Rousthands or The Men as "Get the Men out and tighten up the lines" a common order.

A boat's "nose" is the extreme point of her hull forward, generally called the "bow."

In John Hay's story of *Jim Bludso and the "Prairie Belle"* he has Jim cry out – "I'll hold her nose agin the bank till the last galoot's ashore," and every paper or book that has retold this story has used the word "nozzle" instead of "nose," making it ridiculous.

A steamboat has many nozzles. One on the loose end of every section of fire hose and one in the lower end of each chimney to confine the exhaust from the engines.

A green man may speak of "hiring out" to work on a boat, but one soon learns to use the word "ship" instead. He signs a "Shipping List" or "Shipping Articles," a form of contract.

The question is often asked why we use the feminine pronoun in speaking of a boat. Why always say she? I've heard many reasons given:

Because it takes a smart man to manage her.

Because no two of them act alike.

Because they need a little touching up with paint now and then to look right.

Because her title is not complete without a "husband." (Until recent years every American vessel's *Annual License* had to have some one named in it as "Ships-husband or Managing-owner.")

Because she moves with such grace and quiet dignity.

Occasionally some one builds a freak so homely and awkward looking that we all refer to it as "it." No one uses the feminine in speaking of it.

We always say "make it fast" instead of "tie it up" and we say "let go" or "let her go" instead of "untie it" and in speaking of a person looking sickly or run down we say he "looks like he's all let go."

We use quantities of rope, good manila rope that

comes in large coils but we don't have any ropes on the boat or rafts, they are all "lines" from the small quarter-inch stuff to the heavy inch and three-quarter check lines.

In running rafts through bridges or a piece of narrow, crooked river where we have to divide the raft and take one-half through at a time the usual way is to move the boat over on the outside half or piece – then let go all the coupling lines except one at each end of the raft, back the towboat to kill the headway and get the stern near shore in a favorable place. Then the mate sends the linesmen ashore in a skiff with the end of the check line which they make fast to a tree and the mate takes turns with the bight of the line on the check works built on the piece near the stern and when he gets a good strain on the check line, the two coupling lines are let go, the boat stops backing and proceeds with her piece while the mate lands his piece by judiciously rendering and then holding his line on the check works till the piece swings in to shore and stops.

Then the linesmen pick up the mate and his helper and overtake the towboat.

When below the bridge or bad place the pilot lands his first piece; goes back up and gets the second piece and when below the bridge or bad place that he "split" for, he backs the second piece in beside the first one; keeps on backing to hold it up against the current while the crew put back and tighten up the lines that hold the two pieces together. This is "coupling up," and when completed the pilot backs the whole raft out in the river and lets it float while they move the boat over to the middle and get her all "hitched in" to proceed down river.

This whole operation at a bridge is called "double-tripping."

Another way to run bridges is to move the boat over on one piece, let go the coupling lines and back on the boat's piece while the other one floats ahead until it can be swung in just ahead and made fast close up to the bow of the boat piece, making a "double-header" only a half-raft wide and two rafts long. By backing slow this long timber mass can be placed in shape to slide through the draw span of most bridges.

When below the bridge and clear of the shore the two pieces are coupled up again while floating along and the boat moved back to her place in the middle on the stern of the whole raft.

After bow-boats came into common use some pilots quite frequently "split on the pier" at bridges like La-Crosse, Dubuque or Sabula where each side of the long or pivot pier was open and clear, and the shore span has a sheer boom or stationary "fence" to slide through on.

"Splitting on the pier" meant moving both the tow-boat and the bow-boat over on the piece that was to run the span on the outside of the long sharp-pointed draw-pier.

Holding on to the other piece with coupling lines till they got it in shape, to let go so it would float and slide along the fence or sheer boom the two boats one at each end of the other piece, could back it out so it would slide along the outside of the long pier and with a little shoving by the towboat it was soon placed beside the floating piece and coupled up.

This was a very clever performance when properly done and was the quickest method of all.

Saddle-bagging an island, bar or bridge-pier meant drifting or settling down on to it sideways, to either

break in two or to wallop around it horseshoe shape and hang there.

This was a very serious affair and the usual comment by the deck crew was that "He (the pilot) made an ape's tail of her."

Aside from that derived from experience and observation I gained a lot of information about rafting from George Tromley and Stephen Hanks who were engaged in the work from the start; from E. W. Durant, James Hugunin, George Rutherford, J. M. Hawthorne and others who learned the river while pulling an oar on floating rafts before steamboats were used to tow them.

I learned most from Sam R. Van Sant who built the first real raft-boat. He was my employer for four years and my associate in business for forty years thereafter. He was always well informed about the rafting business outside of our own boats and their operations.

All these men I have mentioned were not only intelligent gentlemen but careful in their statements and dependable for their good judgment and their honesty. They never gave me what the slang users call "a bum steer."

In the material I had saved up to use in this work were the lists of raft-boats, their owners, their masters and home ports found in the appendix. These were made out by Captain Van Sant and myself and published in local papers. We were careful in preparing these lists and know they are correct.

Lists of pilots, engineers and mates were made out later from memory. The list of pilots is complete for I had excellent help to make it so. I know the other lists are *not* complete but we could do no better.

I have been greatly assisted by many kind friends

who have shown a genuine interest in my task by hunting up and sending me photographs to illustrate the work and information to guide or correct me. I want also to acknowledge the courtesy of my Publisher, Mr. Arthur H. Clark, for his valuable suggestions and changes made in the preparation of this manuscript.

I want especially to acknowledge my indebtedness to my friend, Captain Fred A. Bill of Saint Paul, Minnesota, who edited the *Life and Adventures of Stephen B. Hanks*, published in the *Saturday Evening Post* of Burlington, Iowa, 1921-1922, and who has made many original and interesting contributions to the Burlington *Post* and other papers that have encouraged the study of what the preceding generation was doing on our great waterway.

The Burlington *Post* also published *Recollections of the Old River* by Captain J. M. Turner of Lansing, Iowa, from which I secured some of the most interesting facts in the captain's long and successful life.

The Burlington *Post* in August, 1926, began publishing the *Memories of Captain Sam R. Van Sant*, my old-time employer and long-time business associate, who is better known as Ex-governor of Minnesota for two terms. The chapters are very interesting but it is impossible to get the governor to furnish copy regularly. Although eighty-three past, he is so active in G.A.R. work and politics that the *Memories* were laid aside during the presidential campaign.

My information about early logging on the river above Saint Anthony's Falls was derived from the *Personal Narration of Daniel Stanchfield* published in the Minnesota Historical Society's *Collections*, vol. ix, pages 324-362.

My authority about operations on the Saint Croix

river is based on a paper read at the Monthly meeting of the Executive council of the Minnesota Historical Society, April 11, 1904, by Captain Edward Durant of Stillwater – see Minnesota Historical Society's *Collections*, vol. x, part ii, pages 644-675.

Authorities for early operations on the Chippewa, Black, and Wisconsin rivers are *History of Lumber and Forest Industry of the Northwest*, G. W. Hotchkiss, Publisher, Chicago, 1898, and an article on *Waterway and Lumber Interests of Western Wisconsin* by John Milton Holley, A.B., in "Wisconsin Historical Society's *Proceedings* 1906," pages 211-212 – through the kindness of Annie A. Nunns, Assistant Superintendent.

My authority for the output of logs through Beef Slough Boom 1867-1889 and for that of West Newton Slough, 1889-1896 is the *American Lumberman*, James E. Defenbaugh, vol. i, 1907.

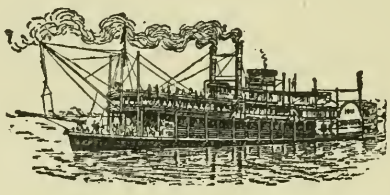
For the output from West Newton 1897 to 1904, I could only get partial reports from the Surveyor-general of Logs and Lumber of the State of Minnesota and from other sources which enabled me to make the estimate given. It is very close to the actual figures.

The reported output of the Saint Paul Boom 1888 to 1916 is complete as given by the Surveyor-general of Logs and Lumber of Minnesota.

My authority for information about the organization and operations of the M.R.L.Co. or "Pool" as it was usually called is *The Mississippi River Logging Company – an historical sketch* by Matthew G. Norton, 1912. Mr. Norton of "Laird Norton & Co." of Winona, Minn., was a prominent member of the company.

The records of the rafting industry are nearly all scattered and lost. I cannot fully express my gratitude to those who have helped me gather up and arrange

all we could find in order to preserve some reliable information about a great, useful, profitable, and interesting activity that began in 1840 and ended in 1915.



Steamer Morning Star of Davenport in 1911

Early River Days

I was born November 17, 1856, in Galena, Illinois. Galena at that time was noted for its rich and productive lead and zinc mines, for its many fine steamboats, prominent and successful steamboat men, and big river commerce.

Captain Smith Harris and his brothers Scribe, Keeler, Meeker, and Jack, Captains Orrin Smith, Charles L. Stephenson, G. W. Girdon, Adam and Stephen Younker, Paul Kerz, N. F. Webb, and E. H. Beebe; Pilots William White, Thomas Drenning, Will Kelly, John Arnold, George Tromley, Stephen B. Hanks, Hiram Beedle, William Fisher, John King, W. R. Tibbals; and Engineers Henry Whitmore, William Myers, James Hunt, George Griffith, and Sam Maxwell, were some of those actively engaged. I still remember them in those happy boyhood days when I found so much enjoyment playing around the old Galena levee, and watching them loading the handsome big steamboats with pigs of lead, sacks of grain, or barrels of pork, for which Galena was noted.

Galena was then the largest and wealthiest city north of Saint Louis, with more of a population than it has today. It is on the Fevre river, five miles from where it enters Harris Slough, which opens out into the Mississippi six miles above Bellevue, Iowa. Fevre river and Harris Slough were both deep then. Boats, fully loaded had no trouble getting out into the Mississippi, and boats like the "Northern Light" or the "Grey

Eagle," two hundred and fifty feet long, could turn around in Galena harbor. When I was there, a few years ago, with the "Helen Blair," we had to back all the way out of the river, and turn in Harris Slough. The "Helen Blair" was only one hundred and eighty feet long. The old, deep Fevre river has been filled up by the soil from the cultivated hills. Besides the large steamers that ran to Saint Louis or Saint Paul, there were smaller ones, like the "Alice Wild," "Charles Rogers," "Belle of Bellevue," the "Sterling," and the "Willie Wilson," engaged in local work, towing wood, sand, and lumber, coming and going to and from the Mississippi.

I have in memory a few days that stand out with more than ordinary interest. One was a fine afternoon when Matt Lorrain, a boy two or three years older than I, took me out rowing in a nice skiff named "Mab," and generously shared with me a sack of peanuts, which he said cost five cents. I recall nothing of the three hundred and sixty-four other days of that year.

One of Galena's noted characters, in those days, was a little Irishman called Conny O'Ryan. Conny had a strong dislike for steady employment. He didn't object to a short job now and then, if the pay was good and the jobs didn't come too close together. He spent most of his winters in jail. Once, toward spring, Owen M'-Gaughy, one of Conny's old pals, took him up some tobacco, and, when about to leave, asked "Will you be soon out, Conny?" He replied, "Me time is pretty near up, but Mr. Pittam says I may stay in, a few weeks longer, if I behave mesilf." One day, as winter was coming on, we asked him what he was going to do this winter, as they would not keep him in jail there any more. He answered, quite cheerfully, "I'll go over to

Dubuque, so I will, and get good and drunk and break in some man's window and they'll sind me up for three months. Divil the lick of work will I do till spring." And that is just what he did.

In 1857, the Illinois Central railroad extended from Cairo, at the extreme southern end of the state, to Galena, in the northwest corner, with a branch from Amboy to Chicago, and was then the longest railroad in the world. The Galena steamboats connected this great railroad with the entire Northwest and it gave the boats regular and reliable connection with the East and South. These conditions, while they lasted, were mutually advantageous to all concerned, and many snug fortunes were made by members of the Galena and Minnesota Company and a few independents.

The lumber handled by the Galena yards nearly all came from sawmills on the Wisconsin river. It was floated down the Wisconsin and Mississippi and towed up the Fevre river by some of the small boats, or pulled and poled up by hand, when the conditions were favorable.

Logs to supply the local sawmill came from the northern pineries in the same way. Considerable Galena capital was invested in lumbering in the Wisconsin pineries. Many of the men who worked on the boats as deck-hands in summer went up to the pineries in winter and helped cut and bank the logs and in early spring, to get the logs down to the sawmills.

Naturally some of these men were engaged to help float the rafts of logs or lumber down the Wisconsin and Mississippi, earning good money while getting back to their summer jobs. In doing this, a few of the more ambitious chaps developed into "raft pilots" who knew the river, and either piloted for so much per

month, trip, or season, or took contracts to run rafts of logs or lumber for so much per thousand feet. In the latter case, the Pilot-contractor hired and paid his own crew, besides furnishing the necessary kit of ropes (called lines) to hold the logs together, making the raft strong and stiff, and also to check and hold it when landing. Some tools were required; besides axes, crank augurs, pike poles, snatch poles, pikes, and peavies. A prudent pilot would also provide a supply of plugs, lockdowns, and brail-rigging, for repair work. Last of all, he must have two safe, easy-rowing skiffs. These things had to be good or trouble was sure to follow. A pilot or company that was known to be niggardly or indifferent about the kit, often had to take men who couldn't get work elsewhere.

Furnishing the provisions, or "grub," was not so particular a matter, for little was expected in the way of variety or delicacies. Salt meats, flour, cornmeal, beans, and potatoes, with coffee and sugar, filled the bill. No milk or butter was expected, but molasses, then plentiful and cheap, was sometimes furnished.

George Tromley, William Simmons, and David Philumalee were the only "floating pilots" living in Galena, remembered in my boyhood. Later, when steamboats were used to guide and tow rafts down the river, the term "raft pilot" applied to a pilot who piloted a raft and the boat towing it. He had to have a government license to pilot the steamboat, while no license was required to pilot a floating raft. Those pilots were usually called "floaters," to distinguish them from others running rafts with steam towboats.

My father was engaged in a retail lumber business, first in Galena, and afterwards in Princeton, a smaller town, on the Mississippi. He secured all his supply

from floating rafts that would land above our yard so we could pick out the cribs and strings that had the kinds of lumber we wanted for our trade.

While this work of selection was going on, the pilot usually stayed at our house. I spent much of my time on the raft with the crew, and was always glad to be invited to sit up to the table with them at meal-time; not because the food was better or even as good as we had at home, but it was different, quite different.

I was greatly interested in the talk of the crew, especially in their arguments. I asked many questions about the Wisconsin river, the Dalles, Little Bull Falls, and other features I had heard so much about. Some of the information they gave me was correct perhaps; at any rate it was colored up enough to create a strong desire to see that wonderful river. For over forty years I have been planning a voyage in an old-fashioned raft-skiff, from Stevens Point to its mouth. I have crossed the river many times, on the railway bridge, near its mouth, but never rode a mile on its surface.

My favorite pilot was Joe Blow, an old Frenchman of Stevens Point, of whom we bought lumber every year. He was intelligent above the average, and had such a delightful Canadian-French dialect and such agreeable manners that no matter how late he stayed up and talked, Mother could not drive us children to bed until Captain Blow went upstairs.

He owned the raft or an interest in it, and did his own piloting down the Wisconsin to the Mississippi, and down the Mississippi to Saint Louis, including both the Upper and Lower rapids. His crew were nearly all "Canucks" like himself, and they treated him with marked respect.

The Mississippi has an average current of two and a

half miles per hour. A floating raft would have the same speed if there were no wind, but it was very much affected by even a light wind, and had to be tied up for any moderate side or down-stream wind. Much time was lost on this account, and even a short trip in distance often turned out to be a long one in time. One windy spring, Captain Blow was six weeks from the mouth of the "Wisconse" to "de Rapid," only one hundred and fifty miles.

The pilots wanted calm weather to run the rapids, because it was impossible to tie up, in such strong currents, if there was much wind. A favorite place to wait for daylight, or calm weather to run the Upper, or Rock Island rapids, was under the bar, in front of Harvey Goldsmith's place, above LeClaire, Iowa. When half a dozen rafts, with their crews of from twenty to thirty men each, were held up here for a few days, with nothing to do, they had high old times.

In low water these rafts had to be cut up into several sections and extra oars shipped up on each end and men taken on, so the sections could be kept in the narrow, crooked "steamboat channel," whereas in ordinary stages of the water the whole raft could be run down "raft-channel."

This low-water work made good business for the "rapids pilots" and "trippers" in LeClaire and Montrose, who received four dollars for the fifteen mile trip "bucking" an oar from LeClaire to Davenport, or from Montrose to Keokuk. This was hard on the owner or contractor though.

I guess "bucking" an oar on a floating raft was the best exercise to develop the lungs and all the muscles that has yet been found. It certainly produced a strong, husky lot of men.

The oars or sweeps by which the raft was handled, consisted of stems twenty feet long, usually young tamarack poles, about twelve inches thick at the big end. Into this was pinned a pine blade fourteen inches wide, about twelve feet long and two and one-half inches thick at the end attached to the blade, and sawed tapering to one and one-quarter inches at the outboard end.

Each string of the raft had one of these oars hung on a head-block across the end and held in place by a two-inch oak pin, working in a long slot through the oar-stem near the big end, and driven deep down into the head-block. This made the heavy oar balance nicely, and with a big, strong man at the end of each of eight to twelve oars, directed by an intelligent pilot, very satisfactory work was done when the weather was calm.

Rafts of both logs and lumber were made up of long strings each sixteen feet wide and about four hundred feet long. The string was composed of logs placed in rows, close together, side by side and butt to butt, and the rows held together by sixteen-foot poles laid across the string and fastened to each log by hickory or elm lockdowns and wooden plugs. The lockdown was bent over the pole, the ends stuck down into one and one-quarter inch holes in the log, and then the plugs driven in to hold them.

Lumber was built in strongly framed cribs at the mill where it was sawed, and slid off into the river by a tilting cradle on which it rested.

Rafts were not made up to size until they were safely out on the Mississippi. About seven cribs long and four strings wide was the usual size run on the tributaries.

The crew lived on the raft on its voyage down to the

mill, where it was to be sawed, or to the market to be sold.

There was so much objection to any structure that would catch wind and cause more work at the oars, that they were contented with very small tents made of rough boards. If any ambitious members of the crew built higher shanties they were usually told to knock them down, the first windy day. Failure to comply with this suggestion frequently resulted in a fight that was sure to end in defeat for the owner, because the pilot or the rest of the crew would knock it down anyway.

They generally had a low wide "cook-shanty" in which they sat down to eat; but often the cooking was done with only a cover to keep the rain off the stove, and the grub was served out in the open, the men standing to eat. The success of the cook depended more on his ability to lick any man in the crew than on his skill in the culinary art. Even the pilot had to give in to the cook, at least until the end of the trip. Most of the cooks were only known by their nick-names, such as Sailor Jack, Spike Ike, Calfskin Ben, Steubenville Jim, Kelly the Cutter, Hayden the Brute, Slufoot Murphey, Double Headed Bob, and many more just as musically named; all good cooks and most of them agreeable when sober, but real bad actors when liquored up.

One day two of them especially noted for their skill as cooks and also for their bibulous habits, met in the Lansing boat store and strange to tell both of them sober.

After friendly greeting Hayden said to Luker, "I thought you were on the 'Caffrey'."

"I was."

"Why leave her; she furnishes well?"

"I couldn't give satisfaction, I was paid off."

"Where did the kick come from, the cabin or the messroom?"

"Why the messroom, of course. The officers were delighted with me work The captain had tears in his eyes when I left the boat; but I couldn't please the men."

"Well Jimmie Luker! I'm really surprised that a 'cuke' of your experience should fail to handle a common situation like that. Why didn't you fill them up on sweet stuff – pie and cake and candy?"

"That's just what I did. I sat up nights making candy and gave them pie and cake three times a day and for midnight lunch and then the reprobates set up the howl for 'puddin' and I quit her right there."

Beginnings of the Rafting Industry

The first lumber run from Lake Saint Croix was from Marine Mills, in 1839; the first logs from Stillwater to Saint Louis by S. B. Hanks, in 1843; the last, a lumber raft in August, 1915, to Fort Madison, Iowa, by the steamer "Ottumwa Belle," W. L. Hunter, pilot.

The Mississippi River Logging Company began operations on the Chippewa river, and took over the work begun by the Beef Slough Boom Company, in 1871, and increased the output steadily, reaching its maximum about 1892, when over 600,000,000 feet passed through its booms in a season.

In 1889-1890, the works were moved to West Newton, from which three hundred million to six hundred million feet were turned out annually, until 1909, when the exhaustion of the timber supply caused a final shutdown.

The first lumber was rafted down the Chippewa river in 1831, and from a small beginning the industry developed rapidly.

The following large companies were engaged in sawing pine lumber and sending it down the Chippewa and Mississippi rivers:

The Badger State Lumber Company
The Eau Claire Lumber Company
The Daniel Shaw Lumber Company
The Lafayette Lumber Company
The Northwestern Lumber Company
The Union Lumber Company

The Valley Lumber Company
The Dells Lumber Company
The Sherman Lumber Company

Also Ingram, Kennedy and Company; the great Knapp, Stout and Company which cut two billion feet of lumber in sixty years, from 1836 to 1896, and the Chippewa Lumber & Boom Company, which cut 325,000 feet a day, with 75,000 lath on the side.

There was lively work bringing this down the Chippewa to Read's Landing, where small rafts or pieces were made up into a large Mississippi raft for down-river.

Sawed lumber and timber were fitted at the rear of the mill into a frame or heavy crate sixteen feet wide, thirty-two feet long, and twelve to twenty inches deep, made of grub plank two inches by twelve inches, held together by heavy two-inch pins of hickory or oak, holding top and bottom sides and ends all solid together. This made a "crib," the unit which was built on a movable platform that, when tilted, would let the crib, slide down, into the river.

A number of these cribs, fastened in regular strings by strong couplings of plank fore and aft and also crosswise, would make a raft of perhaps twenty-four cribs for the Chippewa, and from one hundred and twenty to one hundred and sixty cribs for the Mississippi.

Until the middle sixties, all rafts of both logs and lumber, were floated down by the current and kept in the channel and clear of sand bars, heads of islands, bridge piers, and other besetting dangers, by a crew of strong, lusty men, who used large oars or sweeps on the bow and stern. There was an oar at each end of every string of cribs, so that a raft of ten strings had a bow crew of the ten best men, and the other ten pulled on

the stern. All were under the direction of the pilot, who hired and paid them off, and usually had fair control of them.

The first trace of rafting on Black river was in 1844, when Myrick and Miller sent some logs to Saint Louis, but about two years before this, the Mormons had got out some timber for their buildings at Nauvoo.

This timber was sawed in the mill of Jacob Spaulding, at Black River Falls. The mill, built in 1839, seems to have been the first to begin cutting on Black river. The greatest output was in 1881 – 250,000,000 feet.

Governor C. C. Washburn, prominent in lumbering on Black river, had his home in LaCrosse, Wisconsin, and organized the LaCrosse Lumber Company, in 1871. He was born in Maine, taught in a private school in Davenport in 1839, and in 1840 was elected county surveyor of Rock Island county.

John Paul, C. L. Colman, N. B. Holway, W. H. Polleys, G. C. Hixon, Abner Gile, Oran and Levi Withee, Sawyer and Austin, A. W. Pettibone, P. S. Davidson, G. B. Trow and McDonald Brothers, were all engaged in extensive logging and lumber operations.

The earliest lumbering was probably done on the Wisconsin river. Pierre Grignon had a sawmill operating in 1822, and possibly earlier, on Dutchman's creek. Some of the product was floated out and down the Mississippi, but records are very meager. By treaty with the indians in 1836, Governor Henry Dodge secured the rights for lumbering, and by 1840 many mills were located, and some in operation.

The first raft taken through to Saint Louis of which we have reliable record, was run by Honorable Henry Merrill, who took charge of it at Portage, Wisconsin,

rebuilt and refitted it at the mouth of the Wisconsin river, and delivered it in Saint Louis in 1839. The early saw mills in Galena and Dubuque were supplied with logs prior to this long trip to Saint Louis.

By 1857, three thousand men were engaged in lumbering on the Wisconsin, and the value of the log crop was estimated at $4,000,000.00. As all the lumber had to be floated out of the Wisconsin and down the Mississippi, rafting grew into a great business, and was handled quite systematically, by a hardy, rough, but industrious and reliable lot of men, working under such floating-raft pilots as Dave Philomalee, Bill Skinner, Bill Simmons, Wild Penny Joe Blow, and Sandy McPhail.

Some went through direct to Saint Louis, others peddled by string or crib to dealers in the towns along the way, and the trips would often end at Davenport, Muscatine, or Quincy. Then the crew would take passage on a steamboat going north to start another trip down. They had no work to do going up river, and usually made it one long carousal, so that by the time they reached the mouth of the "Wisconse" or Black river they were broke and glad to go to work again.

Some of the pilots worked by the month, others by the season or trip, the "company" paying all expenses and taking all the chances; but a few had their own kits and ran the rafts under contract – so much per thousand feet, or so much a string.

From 1870 to 1875, I had considerable acquaintance with these raftsmen, on account of my father's lumber yard at Princeton, Iowa, which received all its supply from floating rafts, mainly from the Wisconsin.

Daniel Stanchfield cut the first logs on the Upper Mississippi, above Saint Anthony's Falls, in 1848.

These logs were sawed into lumber by the first mill in Minneapolis, owned by Franklin Steele and others. It began sawing in September, 1848, by water power.

The business increased rapidly, and settlers and immigrants poured into Saint Paul and Minneapolis. In 1856, the surveyor-general reported scaling 6,000,000 feet of logs for Borup and Oakes alone. These logs were run over the Falls to be caught in the Saint Paul boom, where they were rafted and floated down river to other sawmills, a large number going to Saint Louis.

Rum river was cleared of obstructions in 1850, and logging on this tributary increased from 6,000,000 feet in 1850, to 33,000,000 feet in 1854.

The output of the Upper Mississippi above Saint Anthony's Falls rose to 678,000,000 feet in 1899, and totaled 11,000,000,000 feet for the fifty-two years from 1848 to 1899 inclusive.

From 1860 to 1887 very few if any logs passed over Saint Anthony's Falls for down-river mills, as the many large mills in Minneapolis sawed all that came down from the Upper Mississippi and its tributaries within the state of Minnesota.

In 1888 the Saint Paul boom was opened, and rafting logs for down-river mills was carried on here quite successfully. When it finally closed, in 1913, the surveyor's record showed an output of 1,555,854,900 feet during the twenty-four years.

Some pilots took pride in their work and the appearance and good performance of the crew, and made few changes during the season. There was marked difference in piloting even a floating raft. A bright, sober, intelligent pilot, who learned the drafts of water at different stages, would make better time and give the

men less work in bucking the oars. Such pilots could always get rafts to run and men to run them.

On lumber rafts, the crews usually had a board shanty where the cooking was done, and little low dog houses, improvised to sleep in. On long trips, such as from Stillwater or Read's Landing, Minnesota, to Saint Louis, they would fix up comfortable bunks, as they had all kinds of lumber to use and a good floor to start on. On log rafts they usually depended on flimsy tents provided by the pilot, and the conveniences of life were very meager, but the work was healthful, and the life, and excitement, in the open pure air, gave them good appetites and excellent digestion. They usually had plenty of good plain food, and strong coffee. They seldom had any ice, in the hottest weather, or any milk. Sometimes, delayed on a long hard trip, when the pilot's money or credit gave out, these men were just as resourceful as any of General Sherman's soldiers, on their March to the Sea.

The country above Dubuque was very sparsely settled, and the little towns far apart, but it is pleasant to reflect that there is no record of a raftman dying of hunger. An angry farmer, who missed a fat two-year-old heifer one morning after a raft had passed down, overtook the raft by a long, hard row in a heavy skiff. The dressed carcass lay on the logs near the center of the raft, covered with a piece of white canvas. The crew was divided and crouched at the corners of the raft, while the old French pilot sat alone with his head down, when the farmer appeared and questioned him. Old George said, "My friend, I'm glad to see you. I'm in big trouble. My crew are all afraid of me." "How so?" "You see," he replied, "that white ting down

there? – small pox, one of my best men, the cook. I stay and work with him all night but 'taint no use. Now, my friend, you look like brave man. I want you to help me take the cook ashore and bury him." But the farmer was gone; nearly fell in the river in his excitement and hurry to get away.

On reaching a raft's destination – Dubuque, Burlington Iowa, Hannibal Missouri, Saint Louis, or elsewhere – the pilot would ship his kit and provide deck passage on a northbound steamboat back up the river. The pilot, of course, took cabin passage. These returning raftmen had no work to do going back up river. There were often several raft crews on each steamer. Having been paid at the down trip, all had money. Every boat had a bar, and "red liquor" was in demand. The fighting was confined to the lower or main deck, where it annoyed only the boat's crew and other deck passengers. On one occasion, though, these orgies developed into a riot, on the steamer "Dubuque," and several negroes were killed or driven overboard and drowned. The rioters then took charge of the boat for a few hours, and the cabin passengers were in terror, until officers intercepted the "Dubuque" at the Clinton, Iowa, bridge, arrested the rioters and took them ashore for trial.

There has been much noise made about the "riot on the steamer 'Dubuque' " in books and magazines, especially in recent years.

The trouble started easily through the mistake or oversight of the captain or mate in placing a negro at the head of the main stairway forward to keep Irish raftmen from entering the cabin to get their "Mornings Morning" or "Eye-Opener."

There was a bar on the "Dubuque" in the front end

of the cabin and "lower deck" passengers were welcome patrons as a rule. These raftmen had been patronizing the bar quite liberally all the way up but the bartender accustomed to handling them kept them in good humor and within a safe limit; but while lying at Rock Island and Davenport some of them drank a lot up-town after the boat's bar was closed for the night.

She left early in the morning and when these men woke up after the night's debauch they wanted whiskey and wanted it bad.

The officers in charge should have been prepared to take care of this matter. It was an awful mistake to put a negro there to meet the situation.

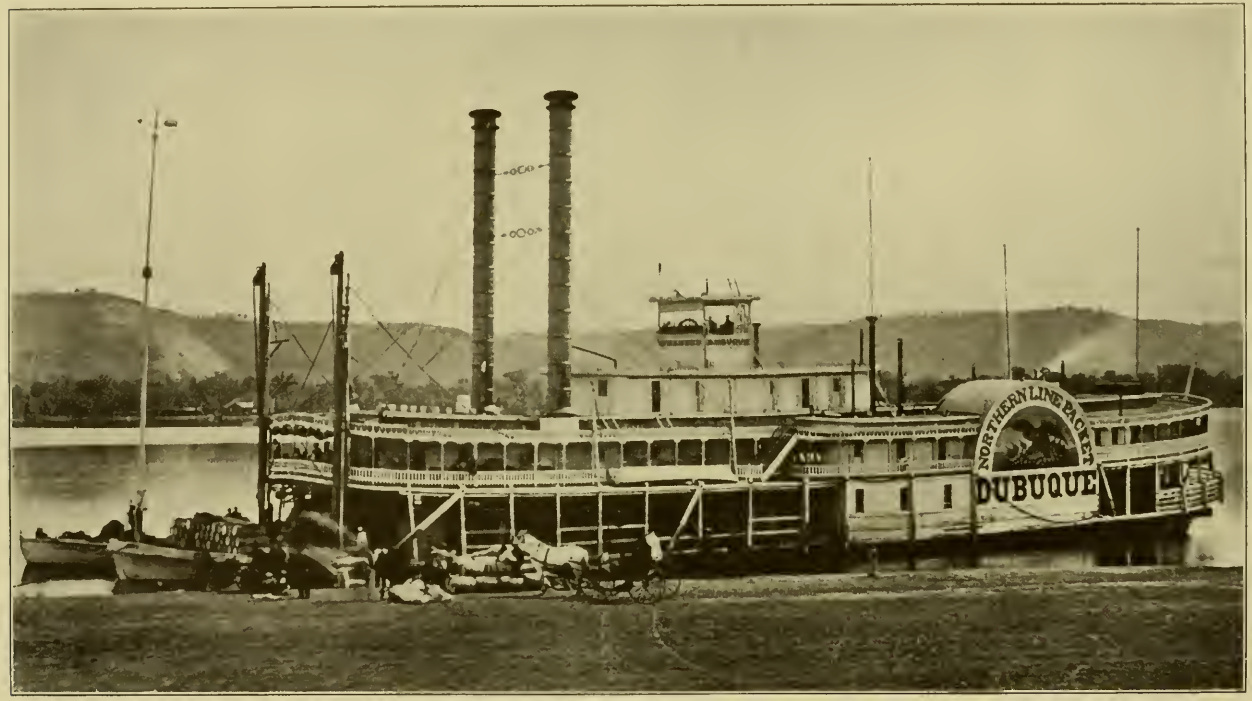
Deck passengers were not allowed to eat in the cabin at all; they got grub from the kitchen down on the main deck. It was whiskey they wanted, not breakfast, and it was no place for a negro in front to turn them back from the bar.

I don't know what river these raftmen came from but think they were from the Wisconsin, as the majority of them were Irish; while on the Black, Chippewa and Saint Croix rivers, the Canadians and Scandinavians were the most numerous.

I never heard raftmen from Black river spoken of as more belligerent than others; nor did I ever learn of a single instance of a real raftman assaulting or injuring a woman or a child. They would fight when in liquor, and this was not unusual on shore in those days.

When a boy I saw more fighting and more blood shed on one Saturday night in the little town of Princeton than I saw among raftmen during my twenty years among them.

The riot on the "Dubuque" was the only affair of the kind that happened during the seventy-five years of the



STEAMER DUBUQUE

This successful steamer, owned by the Northern Line, was built at Pittsburgh, Pa., in 1867. She was 233 feet long, 36-foot beam, and 62 feet wide, over all. The "riot" occurred on her at Hampton, Ill., July, 1869. She burned in Alton Slough, March, 1879. From photograph taken at Winona, Minn.

rafting period. Because it was so unusual, much was made of it.

While clerk on the "Silver Wave" late in the fall of 1879 we had a husky crew of real raftmen which included "Ole" a big Swede and Tom Cleeland an Irishman of good size and build, who was called one of the best men "in the woods."

We had to lay over night at LeClaire on our way down. All the cabin crew (captain, pilot, mate, engineers and cooks) lived in LeClaire, our home port, and all of them had gone home for the night leaving me in charge.

Before leaving, the mate reminded me not to let the deck crew have much money; so when they were free to go up-town all came up together and I handed them one or two dollars each and told them that was all they could have – "mate's orders." All O.K.

At 10:30 P.M. five or six of them came back for more money. I tried to persuade them not to go up-town again – to go down and turn in for a little sleep before four o'clock but they were insistent. So I gave in gracefully, saying, "Boys, you know this is my first season on this boat and I don't like to break orders, but you fellows have always treated me nice, so here's a dollar apiece; spend that and come back and turn in for the mate will be after you at four o'clock, remember." "Oh, das all right." "You been dam good fellar," said "Ole," and off they went and I thought I was done with them.

Just before midnight I heard them come on. After some noisy talk back in the deck room, four of them including Ole and Tom came up-stairs and into the cabin and demanded more money.

I was stirring up the fire with a big poker of three-

quarter-inch iron, three feet long. I swung the door shut with the poker stuck down in the fire and the other end out.

I told them the safe was locked and I was going to bed. "No more money tonight, Olie." Big Olie answered, "Yas; das all right," and went out.

The two smaller men again demanded more money – all their money. I opened the front door and succeeded in persuading one to go out and down but I had to use force on his partner, but got him out and closed the door. Then Tom Cleeland lit his pipe and remarked, "That is a rough way to put a man out."

"Well," said I, "he wouldn't go out when I told him to – I had to put him out, I'm running this place, ain't I, Tom?"

Tom smiled and said, "Well, you can't put me out that way."

"No, Tom, I know that, you're too big for me and I hear you're a hard man to handle. But Tom, I'm in charge here and when I start to put you out, I'm going to do it."

"The hell you will. Just try it," said Tom. By this time with my old gloves on I grabbed the end of the long poker, jerked it out of the fire, about eighteen inches of it red hot, and made for him, and in full tones told him to fly or I would mark him for life. He caught my idea instantly and acted on my advice. I had no trouble after that – we got along fine until the season closed.

Carrying these raft crews and their kits back up river, while sometimes not a pleasant business, was always a profitable one, adding a large amount to the earnings of the packet companies, with very little

added expense. Naturally the packet companies were against the use of towboats helping these rafts down river and carrying back the crews.

One of the Northern Line packets, going up river in the night, ran into a raft, under way, and did it considerable damage. George Tromley, the pilot of the raft, made a claim on the Packet Company, when he delivered his raft to Saint Louis. He was told to leave his bill and they would submit it to Captain Hill when the steamer "Dubuque" returned. Captain Hill refused to O.K. the bill and Captain Tromley's lawyer libeled the steamer "Dubuque" in United States District Court. The bill was then promptly paid, with costs.

Some time later, Mr. Tromley, with his crew, were in Saint Louis to go back up river on the first steamer, which happened to be the "Dubuque." Not long after starting, Captain Hill met Mr. Tromley near the office and bar, and began raking him for making such a big noise to the company and libeling the boat. Mr. Tromley, in his pleasing manner and rich Canadian dialect, said, "Well, Captain Hill, I bring my crew and ride your boat today, don't I?" "Yes." "I pay my way for all my people, ain't that so, Mr. Clerk?" "Yes, that's true, Mr. Tromley." "I ride on your boat before, ain't I, wit my crew and kit?" "Oh, yes, Mr. Tromley, you have traveled with us many times. You are a good customer." "Always pay my way, don't I, Mr. Clerk?" "Yes, indeed, Mr. Tromley." "Then," turning to Captain Hill with his peculiar smile, he said, "Now, Captain, you hear what the clerk say, and these gentlemen (passengers) they all hear too. Now when you come and bring your boat and crew and take ride on my raft, don't you think it only fair you pay your fare same as I?"

Captain Hill was glad to call all hands to "splice the main brace" before supper, and all trouble was over. Mr. Tromley was in many ways the brightest and most interesting character I met in forty years on the river, three of which were spent under his tutorship in learning the river.

Some years later Pilot Tromley was running on the rafter "Silver Crescent." Captain Mitchell, a much younger man, was very excitable and one day after striking the LaCrosse bridge he got terribly worked up. Mr. Tromley took charge of the affair and in a few hours the crew had the raft in good shape again and the "Silver Crescent" was shoving it full head toward its destination.

After clearing up, Captain Mitchell went up to the pilot-house and sat down quietly holding his face in his hand, for several minutes.

Then, rousing up he said, "Mr. Tromley, I believe I'm going crazy!"

Mr. Tromley turned around and with that merry twinkle in his eyes and in the kindest manner said, "Why my dear friend! Are you just find that out? There's a many people on this boat could told you dat good while ago.

"Now captain let me tell you someting! It ain't no use to get so dam excite. I been on this river long time; more than you have; and have had all kinds of trouble raf's broke up, raf's 'ground on san bar, hit bridges, caught in fog or storm but I never yet heard of a saw log come up in pilot-house and kill a pilot." The captain laughed heartily and it really helped him.

Beef Slough

The Beef Slough Boom and Improvement Company was organized in 1867, and chartered by the state of Wisconsin to catch, sort, raft, and scale all logs coming down the Chippewa. These were turned into Beef Slough by a sheer boom at the head, and jam booms farther down were used for holding the run in high water. The company was allowed to charge seventy-five cents per thousand feet for logs, and two cents each for cross ties.

It was soon demonstrated that this was a great improvement over separate operations by individual owners, and when this company was taken over by the Mississippi River Logging Company, in 1873, it was soon evident that the sufficient capital and vigorous and intelligent management of this organization would take excellent care of the Chippewa outfit and keep the large mills regularly supplied, as long as the timber supply held out.

Beef Slough is a branch mouth of the Chippewa river, leaving the main stream at Round Hill, and following down along the high Wisconsin bluffs for about twelve miles, opening into the Mississippi just above the town of Alma, Wisconsin.

By dredging and digging at its head, and removing obstructions in its course, the diversion was much increased into this slough, and then a long, heavy sheer boom placed diagonally across the Chippewa, not only turned all the logs into Beef Slough, but greatly accelerated the current and gave good water to work on.

Thousands of piling were driven and many booms placed, and pockets and chutes arranged, so that the big crops of logs were saved. They were sorted, rafted and scaled, with check works and guy line pins, all ready for tow boats to hitch into, and were taken away and delivered to the big mills down river as fast as the seventy-five steamboats on the Upper Mississippi could go up and down.

During the busy season, between 1200 and 1500 men were employed in Beef Slough, and the work was handled with great system and energy.

While Mr. Weyerhaeuser was seldom seen at the Slough, his spirit was always evident. Mr. Irvine in the earlier years lived at Wabasha, and was at the office nearly every day, with George Scott directly in charge. Other men were E. Douglas, at the rafting works, D. J. McKenzie, head scaler, Kinney McKenzie in charge of the "dropping," Duncan McGillivray as assignment and delivery clerk, and Pete Short handling the catch boom at the mouth.

The steamer "Hartford," under Captain Henry Buisson, was busy dropping out half rafts to places of safety, where they would lay at owner's risk until taken away by some other boat.

The steamer "Jessie Bill," under Captain Lew Malin, was doing all kinds of company work, while the "Little Hoddie" was "bowing out" and towing batteaux crews back up to the works.

Twice a day the local steam packet "Lion" passed up through the lower end of the Slough, landed at the office to let off mail, passengers, and a little freight, and then out through the "cut off" on her way to Wabasha, Minnesota.

There was no railroad on the Wisconsin side, and

STEAMERS STILLWATER AND LADY GRACE

The Robert Dodds shown in the foreground, is going out with one-half of her raft. The view shows a group of raft-boats at the office of the M. R. L. Co. in Beef Slough, which in 1884 turned out 674,000,000 feet of logs and kept 75 towboats busy

Captain H. C. Wilcox had a nice trade between Alma, Wisconsin, and Wabasha, Minnesota, making two round trips a day.

All the bosses and many of the men working in Beef Slough were Scotch-Canadians, who had been lumberjacks back home on the Ottawa or Saint Maurice, and their quick, decisive speech with the burr on it, pleased me very much. You could not throw a boom plug at any crew and not hit a Macdonald, or a Mackenzie, and probably get one back from a Duncan.

Each raft was composed of two pieces (halves) of three brails each. A brail of logs was six hundred feet long and forty-five feet wide. The rim was made of the longest logs, fastened at the ends with about a thirty-inch lap, by a short, heavy chain of three links. A two-inch hole was bored nine inches deep in each log, and a two-inch oak or ironwood pin, with a head on it was put through an end link of the chain, and driven hard into the hole in the boom log. These logs, so fastened, made a strong boom or frame (with just enough flexibility to suit the job) into which the loose logs were carried by the current, and skillfully placed endwise with the current, by men, using pike poles and peavies. Then one-half-inch cross wires were placed and tightened, to hold the boom and logs together and prevent spreading.

When a brail was completed, two men with a double-headed skiff or batteaux, would drop it down, by the current, one to three miles, and snub it in, where later two more brails would be landed beside it. Then a fitting crew would come and drop the three brails even at the stern, fasten them together, build "snubbin works" and other things necessary to complete a "piece" or "half raft" all ready for a boat to hitch into.

When the tow-boat came to take these pieces away, she would move alongside slowly, while the mate and his men threw off the cross lines, reaching across the three brails, and the windlass poles, with which they were drawn up and made taut.

Then they would turn the boat around (not by any means an easy task in such a close place), hitch her into the stern of the raft, with head lines straight out to the check works to back on, and breast lines from her head to the right and left, to keep her stem, or nose, on the butting block, and guy lines out from the midship or after-nigger to the stern corners of the raft, to hold the boat in any desired position.

The butting block was a big log securely fastened, by timbers and chains, to the stern boom, to tow on.

Then part of the crew ran out the long A lines, running diagonally across from the outside booms, crossing X like in the middle (these to keep her straight and prevent buckling), and others put on the corner lines to prevent the heavy strain on the guy lines from pulling the corners back. The mate with one or two good men, put on and tightened a heavy monkey line, to help the butting block. When this was done, she was all ready to back out, with the "Little Hoddie" hitched in across the bow, to back or come ahead, moving the bow to right or left, to clear the other pieces on either side of the channel, just wide enough in places to let the bow through, sometimes the outside booms rubbing on each side. The mate and a few men watched close to loosen her up if she caught anywhere.

Sometimes she would catch and foul, and tear a brail loose, or make a drive. Then came the call "tie up, the catch boom is closing," and a general tie-up of two or three hours would follow, till the loose logs ahead were

secured. Usually, though, all went off wonderfully well, and she soon passed the closing boom and out of the Slough into the Mississippi. Soon they tied up under a bar or on the foot of an island, while the boat went back to the Slough and got her second piece.

When coupled up, these two pieces made a raft two hundred and seventy-five feet wide and six hundred feet long. They contained 800,000 to 1,000,000 feet of logs, weighed 3500 tons, and covered three acres.

The output from Beef Slough was 12,000,000 feet in 1867, 26,000,000 feet in 1869, and 10,000,000 feet in 1870.

From the time the Mississippi River Logging Company took control, in 1871, the annual output increased quite steadily, until it reached 535,000,000 feet in 1885, 405,000,000 feet in 1887, and 542, 000,000 feet in 1889.

In 1889, the operations were transferred from Beef Slough to West Newton Slough, a little below, on the opposite side. They were conducted by a new company, but it was composed of the same stockholders, and headed by the same officers.

Not only the logs belonging to the "pool," as it was called, but all logs coming down the Chippewa were handled and delivered to their owners in regular raft shape, on the regular charges allowed by the state charter.

There were over 2,000 different marks on the logs scaled up and passed through the Slough. The way this was done was certainly a fine demonstration of efficiency and square business methods.

West Newton reached the peak of its business in 1892, when 632,150,000 feet of logs were rafted out.

Using West Newton as a base required the driving of the loose logs out of the main mouth of the Chip-

pewa at Read's Landing, and down the Mississippi to the head of West Newton Slough, and to place a big, long sheer boom above the mouth of Beef Slough, to throw the logs over toward and into the head of West Newton Slough.

These loose logs between the sheer boom and Read's were often too thick to run through, especially when the Chippewa was rising, and it was common for steamboats to have to tie up for a few hours until the heavy run was over.

From 1892 the output decreased steadily until 1904 when the "great game" ended for good. This was because the supply of pine accessible to the Chippewa and its tributaries was exhausted.

In 1909, the Mississippi River Logging Company, of Clinton, Iowa, was dissolved, after a most highly successful career, during which nearly every one of its members became millionaires.

During the period of its greatest activity, the officers were: Fred Weyerhaeuser, of Rock Island, Illionis, president; Artemus Lamb, of Clinton, Iowa, vice-president; and Thomas Irvine, secretary.

The principal members of the company were:

Youmans Brothers and Hodgins	Winona, Minnesota
Laird, Norton and Company	Winona, Minnesota
Winona Lumber Company	Winona, Minnesota
W. J. Young and Company	Clinton, Iowa
C. Lamb and Sons	Clinton, Iowa
D. Joyce	Lyons, Iowa
Dimock, Gould and Company	Moline, Illinois
Weyerhauser and Denkmann	Rock Island, Illinois
Rock Island Lumber and Mfg. Company	Rock Island, Illinois
Musser Lumber Company	Muscatine, Iowa
Hershey Lumber Company	Muscatine, Iowa
Shulenburg and Boeckeler	Saint Louis, Missouri

My First Year Rafting, 1878

My service on the Mississippi river began late in March, 1878. I had finished the winter term as teacher of the intermediate room in the public school at Princeton, Iowa. About 11 P.M., I boarded the nice steam raft-boat "LeClaire Belle," bound for Savanna Bay, for a raft of logs for Carson and Rand, of Burlington, Iowa.

The "LeClaire Belle" was owned by Captain Sam Van Sant of LeClaire, Iowa, and S. & J. C. Atlee of Fort Madison, Iowa.

Captain Van Sant was her manager, and he put me on her to do what clerking there was, and with Will Davenport, who became my partner, I stood regular six-hour watches running the nigger-engine while towing rafts down stream, and as watchman going up river.

As clerk, I had to keep the log book, the time and expense books, buy all supplies, fuel and sundries, and pay for them. On the delivery of each raft, I had to get a receipt for it, showing the number of strings, or brails, and the scale in feet, and draw enough money from the mill company, to whom we delivered the raft, to pay the trip's expenses. The crew were all paid up at the end of each trip, and also all bills for supplies.

Captain Van Sant impressed upon me the importance of keeping close watch of my cash book and the necessity for balancing my cash at least once a day, as the work in the office was often done in a hurry amid more or less noise and confusion. I am still grateful to him

for getting me started right in discharging a duty which in time became a habit that saved me from loss and worry, and gave me real pleasure.

Getting on board late at night, I took the berth assigned to me, by the mate, but did not sleep much. At breakfast I was made acquainted with James Hugunin, master and pilot, George Tromley, Sr., pilot, R. B. McCall, mate, Thos. Wright, chief engineer, Add. Mikesell, assistant engineer, Wm. Davenport, my partner, Ben Shipley, cook, and Harry Carleton, cabin boy.

Later I became acquainted with the firemen, John Shannon and Martin Larkins. She had eight or nine men on deck, of whom I remember only one, Johnny Bagley, who often helped me by "watching the nigger" when I had some work to do in the office, and he posted me about my numerous duties and steamboat rules and ways of doing things. Old Martin, the fireman, also took interest in me, reminding me what my rights and duties were. While I made a few bad cracks, of course, with their help I made rapid progress in getting into my place. We all were on the boat at the close of the season, during which we ran logs from Stillwater, Minnesota, to Atlee's mill in Fort Madison, Iowa.

The "Belle" was only six years old, with hull, machinery and boilers in excellent condition. She had a nice, comfortable cabin for the officers, with kitchen, pantry, and mess-room at the after end.

The office was directly in front, and was fitted up complete, including a good, small safe with combination lock. I was proud to work in this little office, and determined to hold the job. Nothing but gatling guns and police dogs could have driven me away from it.

The pilot and mate were kind and helpful from the start, as was the assistant engineer, and before the sea-

STEAMER LECLAIRE BELLE

One of the best and most successful boats of the old raft fleet, 1873-1890. Captain Sam Van Sant owned one-half interest. The author was clerk and watchman in 1878

son closed, the captain and chief engineer became pleasant and agreeable.

The "Belle's" oak hull was one hundred and twenty-five feet long, twenty-two and one-half feet wide, and drew twenty-eight inches light. She had two boilers, and engines fourteen inches bore by four-foot stroke, applied to a stern paddle wheel. She was a nice, easy boat to steer and handle, and was real fast when running light, but slow when loaded down with coal.

When we reached Savanna Bay, the next morning after I "shipped," we found that the raft had been laid up so long that the rope booming was all rotten. We put in the whole day rebooming it and getting it ready to run.

That night we had a snow storm, and it was late the next day when we got the two pieces dropped down through Sabula bridge, and coupled up below Dark Chute, after dark. Here I got into my first trouble. I took red lanters to hang on the outside corners of the raft next the channel.

As walking logs was a new thing to me, I took a bright lantern to light me back to the boat. I hung my red lanterns all right and was carefully picking my way back to the boat, when a piece of rotten bark, covered with snow, gave way, and I fell, hurting one knee. My bright light got wet and went out. I had to crawl back on my hands and one knee. The other was stiff and sore, but I managed to avoid exposure and gaffing.

When we delivered the raft at Burlington, Mr. E. D. Rand paid me in full and gave us an extra one hundred dollars on my explanation about the delay and extra work in getting the raft ready. This settlement pleased our manager when I reported to him about col-

lecting one hundred dollars more than the contract price, as he had not suggested claiming any extra pay.

The "LeClaire Belle" made one trip to Saint Louis during low water in September. She made this trip under charter to the Eau Claire Lumber Company. Captain Peter Kirns took charge and Captain Hugunin went with him as pilot. He did not need a clerk, or had one of his own, so George Tromley and I did not get to make this trip, but were transferred to the "Silver Wave" until the "Belle" returned.

On this trip the "Belle's" lumber raft was put through the new Keokuk canal. Coming back up, while locking through, some of the crew gathered a lot of persimmons, which were growing plentifully along the canal-side. They ate all the ripe ones, and carefully put some green ones where I would find them. Fortunately I boarded the boat long before daylight on her return, and had my first experience with green persimmons before there were many around to witness my struggles to get my mouth back in shape so I could talk and eat my breakfast. I threw the others all overboard, but claimed I had eaten them and liked them. Any one who has not tried eating green persimmons should try a few to get the correct idea.

On our first trip to Stillwater, Minnesota, for a raft, there was much to see and enjoy. I had never been above Dubuque before, and that is where the fine bluffs scenery begins.

Many fires on the bluffs at night added much to the natural grandeur of the Great Cañon. At that time, wood cut on the bluffs was the principal fuel used by the many steamboats operating north of Dubuque. Every spring, too, there was a lot of brush to be burned away. The work was usually done at night, and cer-

STEAMER CLYDE

Iron hull, side-wheel rafter, built at Dubuque, Iowa, 1870, for Ingram and Kennedy. Changed to a stern-wheeler by J. M. Turner and A. F. Hollinshead about 1889. Now (1929) towing pig iron on the Tennessee river and owned by The Arrow Transportation Company. She was the first iron hull on the upper Mississippi – very fast but hard to steer and often broken down

tainly presented many beautiful pictures. I stood the forward watch, 6:30 to 12 A.M., and 6:30 P.M. to midnight, so I had plenty to look at, and often stayed up until long after my partner came on watch.

There were no wing dams in the river then, nor one-tenth as many sand-bars, but there were a few crossings that were bad every season during the low water period (usually during August and September). Places like Bellevue, Queen's Bluff, Chimney Rock, and Beef Slough bars were wide and shallow. I have seen eleven boats aground on, or waiting to get over, Winona bar. These were the first places to which the wing dam or jetty system was applied with success that led to its adoption for the entire Upper Mississippi.

The old penitentiary of Minnesota was located at Stillwater. While the crew was fitting up the raft, I had some business ashore, and leisure enough to visit the state prison, in order to get a peek at Cole Younger. He was in for a long term for aiding Jesse James in robbing the bank in Northfield, Minnesota. This was considered a great feat then, but would be a very tame affair in these progressive days.

Cole Younger was a well built, handsome man. After serving many long years, with excellent behavior, my old employer, Captain Sam Van Sant, having become governor of the state, pardoned or paroled him, and took a real interest in him. He had paid the penalty and had become a changed man.

On our second trip to Stillwater, we laid there all night to clean boilers. The streets were full of men who had come down on "the drive." They brought the log crop from the woods, down the little tributaries into the main stream, the Saint Croix river, breaking jams, sacking, rolling, and following them down into

the great catch booms at the mouth of the Saint Croix, where it empties into the head of Lake Saint Croix, at Stillwater. This beautiful lake is thirty miles long, and empties into the Mississippi at Prescott, Wisconsin. It made an admirable place to hold rafts, and store logs and lumber ready for towing down river.

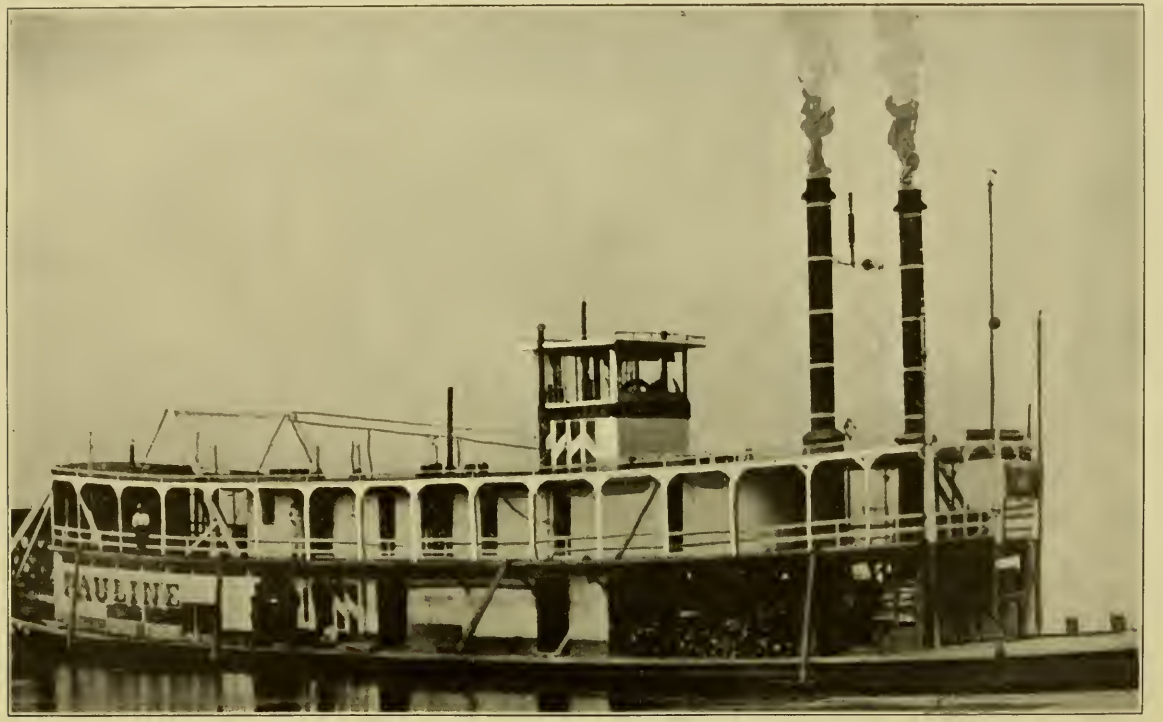
These strong, husky men from the woods wore blue or red mackinaw jackets and high boots, with calks in heels and soles so they could hold their footing on loose, slippery, rolling logs.

They were here drawing their pay and most of them spending it freely. The places of amusement and refreshment were doing good business. After their fling in town, many of these men put in the summer season on the raft-boats engaged in towing logs and lumber to mills and yards down river.

Durant, Wheeler and Company had a fleet of nice raft-boats, and handled a good share of the output from the Saint Croix. Captain A. R. Young had the big towboat "Minnesota," Captain Hank L. Peavey had an excellent boat the "Penn Wright," and Isaac Staples, who had a part in everything in Stillwater, was building two fine raft-boats, the "Isaac Staples," and the "I. E. Staples."

The "Helen Mar" and the "Ada B." were laid up and for sale. I wanted one of them badly, but could not raise money enough, and my employer, who was willing to take a chance with me, thought the outlook was not good anyway. The year 1878 was a dry season, and not a busy one on the river. Conditions changed the next year for the better, and improved right along for several years. The "Mar" or the "Ada B." would have been a good buy.

The "Ada B." was bought by United States engineers



STEAMER PAULINE

Built at Stillwater, Minn., 1879, for Durant, Wheeler and Company. Engines ten inches by six feet. Owned and operated later by Captain J. M. Turner of Lansing, Iowa

and rendered many years of excellent service. When she was condemned and sold, in February, 1924, I was the successful bidder. So I owned her at last, over forty-five years after I first saw and wanted her. I soon sold her, at a profit, but let her go with great regret, as she was a peach to work with. The United States engineers condemned her so they could buy the Mayo's pleasure boat "Minnesota," to replace her. I got the "Ada B." for $1250.00, and the United States paid $35,000.00 for the "Minnesota."

As my duties going up river were very light, I could spend considerable time in the pilot-house, where I could be learning the river. Pilot Tromley gave me every encouragement, and I will always hold his kindness in grateful recollection. He was a French-Canadian, and, not having learned to read, had retained much of his native dialect, using many expressions that were just delightful. Though not educated, he was bright and well informed. He was a pleasant man to meet casually or to stand watch with, day and night. Though he had been on the river forty-five years, and was about seventy years of age, he was straight, handsome, and healthy, not only the liveliest person in the crew but the best company I ever had through a season. Several years after, when I was in charge of the "Ten Broeck" and the "J. W. Mills," I had him with me as my pilot-partner. He was just the same genial, kindly, fun-loving, old Canuck as when he gave me my first lessons in piloting, on the "LeClaire Belle."

In 1871, Taylor Williams opened coal mines at Rapids City, Illinois, at the upper end of the LeClaire Rapids and soon built up a big trade supplying coal to steamboats, at LeClaire, Iowa. The coal was loaded into small cars at the mines, one and one-half miles

from the river, and these were run down by gravity to the river bank, and dumped into barges, holding 1500 to 2000 bushels. These barges were towed over to LeClaire by the handsome little steamer "Jennie Gilchrist." This coal was found at the right time to help steamboating on the Upper Mississippi, especially the rafting. The raft-boats could fill up on excellent coal at LeClaire, at eight cents a bushel, or two dollars a ton on the barge. Some of the boats could carry enough coal to make the round trip up to Beef Slough and back, while others would have to take on wood up river.

There were many regular wood yards, where good, dry wood was ranked, close to the water, to supply boats landing for it at any time, day or night. The most notable wood landings were Harringtons (below Bellevue), Finley's (above Dubuque), Saint Louis woodyard (below Guttenberg), Frenchtown, Clayton, Dave Morrell's (at the mouth of the Wisconsin river), Fred Worth's and Dave Worth's (above McGregor). At Lynxville, Wisconsin, Tom Bright and Lish Randall had wood flats loaded ready to be taken in tow and unloaded under way. Jim Latshaw and Bill Tibbetts sold wood at Victory, and Charley Ott, Pearl Oliver and Jo Franzeni, at Bad Axe, also had wood boats and were considered experts in loading it for sale. By putting all crooked limb wood down in, and placing nice, straight split wood on top, an expert could take thirteen cords off the bank and make a good showing of what measured eighteen to twenty cords in the flat boat.

John Witte had a good yard at Brownsville, and there were others at Hammond Chute, Queen's Bluff, The Stone House (above Winona), Fountain City, Richtman's, Belvidere, and West Newton. John Harry had wood in flats at Alma. Above Lake Pepin, we

could wood at Trenton, Diamond Bluff, or Smith's, and we could get good, coarse, dry slabs at Glenmont in Lake Saint Croix.

We thought our expenses were high then, when we were only paying two dollars a ton for good coal, two dollars and fifty cents a cord for dry oak wood, and one dollar and twenty-five cents to one dollar and fifty cents a cord for slabs, piled on the bank, at a few mills that catered to this trade.

We were paying men on deck twenty-five dollars a month, thirty-five dollars to firemen, ninety dollars to chief engineers, and sixty dollars to assistants, sixty dollars to the cook, and fifteen dollars for his helper, on boats that only carried their own crews.

On some boats that carried families and friends of the owners, they paid ten or fifteen dollars more to the cook, and carried an extra boy in the cabin.

Living was good, for supplies were plentiful, and very cheap compared with present prices. Ice was two dollars per ton, eggs ten to fifteen cents a dozen, meat six to ten cents a pound, with liver and bones for the dog thrown in, potatoes twenty to fifty cents a bushel, cat fish ten cents, buffalo fish eight cents, crappies and sun fish also eight cents, and frogs' legs seventy-five cents a dozen. Pancakes and "jambolaye" were our standbys for breakfast, and our strong suits in desserts were "Sally Lunn" and "Dead man's leg."

Going down stream with a raft, at the rate of three and one-half to four miles an hour, I frequently had to take one of the skiffs and two linesmen to row it, and pull ahead of the tow, to get ice, meat, milk, and fresh vegetables. Going ahead to Fountain City, we could get our skiff loaded, and easily catch the boat while she was backing the bend in Betsey Slough. At Winona, I

would step off while she was double tripping the bridge, and have everything ready at the river side to load in the skiff when she came down with the second piece. We always pulled ahead at Lansing, as it was our best fish and vegetable supply, and a handy place to get ice and mail.

Gaunitz brothers ran the boat store at Lansing, Iowa, many years, and had a nice boat trade. Their books show that they once had twenty-four steamboats at their pier during the twenty-four hour day. At another time they put up and delivered seven hundred and twenty dollars' worth of goods to boats in one night.

In nearly every town along the river you would see the sign "Boat Store" on one or more stores on Front street. This usually meant only a grocery store that catered to the steamboat trade during the day and evening. Some few gave a night service too.

However, there were only a few real boat stores, such as Ward and Brady, at Saint Louis; Hansen and Linehan, and Diamond Jo stores, at Dubuque, Iowa; McDonald Brothers and P. S. Davidson's at LaCrosse, Wisconsin, where they kept groceries, rope in all sizes, blocks and pulleys, shovels, picks, hand-pikes, axes, peavies, augers, and all rafting supplies and tools. They had a sail-loft, where tarpaulins and canvas covers of all kinds were made. I always loved the smell of oakum and rope that came from up-stairs.

During good water stages, we made round trips between Stillwater and Fort Madison in ten or eleven days. When the river got low and we had to double-trip from Read's Landing, at the foot of Lake Pepin to the foot of Coon Slough, it took us fourteen to sixteen days.

In ordinary stages of water, our boats could follow

THE ARTEMUS LAMB WITH AN EXCURSION PARTY

Owned and operated by C. Lamb and Son of Clinton, Iowa, 1873-1898

"down the shore," or raft channel, on the Upper, or Rock Island rapids (fifteen miles long, extending from Rock Island, Illinois, to LeClaire, Iowa), but we always employed a special rapids pilot, and we never started over until daylight. When the river got low, we had to double-trip the rapids part way at least (that is, take over one-half of the raft at a time), with a smaller boat on the bow to shove ahead or back into, the narrow crooked channel.

These rapids pilots became very skillful in their work. There was a sharp rivalry between them for trips, when business was dull. During the busy seasons, they all had plenty to do. At the time I began rafting, 1878, J. W. Rambo and D. F. Dorrance had nearly all the rapids work, but J. N. Long was edging in whenever he got a chance, and soon held his own with the others.

Each of the pilots owned or had an interest in a bow-boat, which assisted in getting these big rafts over in low water. The pilots' own pay and their share in the earnings of the bow-boats meant a good income, but they spent it freely, and had very little left when the business ended. D. F. Dorrance and John Smith had the first regular bow-boat, the "Prescott." Then Dorrance bought the old "Wild Boy," cut off her cabin, and after using her one or two seasons, dismantled her, and used her machinery on a nice, new boat, built at LeClaire, and called the "Pilot." John McCaffrey had part interest in this boat. He also had gotten into this rapids game, after resting up from his arduous and successful operations in running logs and lumber by contract.

At this time, Rambo and Long were using the "Last Chance" as their bow-boat, getting a percentage of her

earnings, she being owned by the LeClaire Navigation Company. I was on her as master all season, and while she was engaged on the rapids, in low water, I learned to bring her back up between trips while the rapids pilots rested for another trip. This was a fine chance for me to learn the rapids, and I embraced it, and soon had removed from my pilot's license the phrase: "The Rock Island Rapids excepted," so that the license allowed me to pilot from Saint Louis to Saint Paul and Minneapolis, and to Stillwater, on Lake Saint Croix.

Dorrance later sold the "Pilot," and built a larger boat called the "Irene D." at Kahlke's boatways at Rock Island. Her engines, twelve inches by eight-foot stroke, were built by Kattenbracker and Weithe in LeClaire, and she was a strong, fast boat.

Then Long and McCaffrey had the "Jo Long" built by Swain at Stillwater, with engines twelve inches by six-foot stroke. She was very fast and more satisfactory in every way than the "Irene D."

Meanwhile, Captain J. W. Rambo and his backers, which included Mr. Jacob Suiter and Joe Manwaring, built the "West Rambo," neither as large or fast as the others, but she was a handy, useful craft, and did a lot of work.

The "Pilot" was still owned at LeClaire, towing rock to Davenport, and the "Jennie Gilchrist" was there, towing coal. This made five nice, light, handy boats that tied up at LeClaire every night.

The rapids pilots' fee for a straight, single trip down, was ten dollars. If he had to double-trip from Duck Creek or Stubb's Eddy, it was fifteen dollars. In low water, when they split the raft, at LeClaire, and put it down steamboat channel with a bow-boat, we paid the

pilot twenty-five to thirty-five dollars and from forty-five to ninety dollars for the bow-boat.

When we had good water, and no fog nor wind to delay us, we got coupled up and under way from below the Davenport bridge by 9 A.M. and had an easy, open run, with no bridge, to Burlington, Iowa, reaching there at daylight the next morning. After splitting the raft in Rush Chute, we coupled up below the bridge about 8 A.M., went on down and reached Fort Madison, our destination, that day. We delivered the raft to the sawmill, got our lines and other stuff aboard, and were off up the river again by evening.

Our expenses were divided under five headings:

Portage, or salaries and wages.

Fuel, including coal, wood, etc.

Provisions, including ice and all eatables.

Sundries, such as oil, rope, tools, packing, etc.

Rapids expense, including pilotage and bow-boat service.

At the end of each trip, I closed up these accounts and sent each owner a statement taken from the books, something like the following:

STEAMER LECLAIRE BELLE

Statement Trip No. 10 – June 20 – July 2, 1878

EARNINGS

Running 14 strings of logs, Stillwater to Fort Madison, for S. & J. C. Atlee, at $110.00 per string	$1540.00
Towing barge Fairport to Red Wing	100.00
Two Round Trip passengers Davenport to LaCrosse	30.00
	$1670.00

EXPENSES

Portage, 13 days	$ 468.33
Fuel, 13 days	260.15
Provisions	104.55
Sundries	159.06

Rapids expense up and down	35.00	1027.09
Profit		$ 642.91

We often made trips when we had no earnings outside the raft, and some trips were lengthened by fog, storm or some mishap.

I can't remember how many trips the "Belle" made that season, but I do recollect that she was over seven-thousand dollars ahead, when she broke her shaft, above Eagle Point, on her last trip down, in November, 1878.

Captain Van Sant then chartered the "Artemus Lamb," which came up, and after taking the "LeClaire Belle" to the Diamond Jo boatways at Eagle Point, hitched into our raft and delivered it to Fort Madison.

This ended my first season on the river, which had been interesting, pleasant and profitable. I saved my wages, for there was no opportunity all summer to spend money.

I recall, however, one evening in Burlington, Iowa, when the boat was double-tripping the bridge. I had seen the cards announcing a lecture by T. DeWitt Talmadge on "The bright side of things." The ticket was fifty cents, and I was there greatly enjoying this fine treat, when I heard the "Belle" whistle for the landing. Reluctantly but hurriedly, I withdrew from the hall and reached the river bank as the boat came in. They put out some lines, and I then asked the captain if they were going to lay over in Burlington, and he answered "Yes." I told him I was sorry I didn't know that for I had left a fine lecture in the interesting part. He then urged me to hurry back to the hall. I did so and enjoyed one of the best things the great orator ever gave to the public.

The Great River then (1878) And now (1928)

During the year 1878, there was considerable life on the Upper Mississippi aside from the rafting business. There were many small, local packets running in short trades, like the "Charles Rebstock," or "Albany," between Davenport and Clinton, the "Ella" between Ferryville and Lansing, the "Vigor" between Brownsville and LaCrosse, the "Robert Harris" between Fountain City and Winona. The "Penquin" ran between Alma and Winona, the "Lion" from Alma to Wabasha, the "Ida Heermann" from Read's Landing up the Chippewa to Eau Claire, Wisconsin, the "Phil Schaeckel" from Read's up to Menominee, the "G. B. Knapp" between Prescott and Taylor's Falls, the "Maggie Reany" from Stillwater to Saint Paul, and the "Belle of Pepin" between Pepin and Lake City.

The Diamond Jo Line operated the new steamer "Josephine" between Fulton and Burlington, and also had the "Diamond Jo," the "Josie," the "Imperial," the "Arkansas," the "Tidal Wave," the "Libby Conger," and many barges, operating between Fulton and Saint Paul.

Also, the consolidated Keokuk-Northern Line packet company had a large fleet of fine, side-wheel steamers like the "Minneapolis," "Minnesota," "Muscatine," "Belle of LaCrosse," "Northwestern," "Red Wing," "Clinton," and "Lake Superior," and the stern-wheelers "Annie" (later the "White Eagle"), "Grand Pa-

cific," "Keokuk," and others, giving frequent and regular service over the entire Upper Mississippi.

In 1881, the Diamond Jo Line added two new large stern-wheelers, the "Sidney" and "Pittsburgh," to its fleet, and became a strong competitor of the Keokuk-Northern Line for the passenger business between Saint Louis and Saint Paul.

The "Pittsburgh" was conceded to be the best all-round stern-wheeler on the Upper Mississippi. She was two hundred and fifty-eight feet long, forty feet wide, five and eight-tenths feet in the hold, and measured seven hundred and twenty-two tons. She had fine engines, twenty-two inches by seven feet, three large boilers, a good cabin, and large, roomy texas. The "Pittsburgh" was fast, of light draft, and a good handler. Captain John F. Killeen, superintendent of the Diamond Jo Line, was her master from 1882 to 1893, and under his management she became very popular and successful.

In 1878, there were a few fine raft-boats whose owners made provision for pleasure trips for their families and friends, which did not in the least interfere with the regular work. The crews were glad to have company aboard.

C. Lamb and Sons of Clinton, Iowa, had the "Artemus Lamb," one of the handsomest and best boats ever built. The Hershey Lumber Company, of Muscatine, Iowa, owned the "B. Hershey," a strong, comfortable boat.

The "Hershey" was in charge of that prince of pilots and thorough gentleman, Cyprian Buisson, of Wabasha, Minnesota. There were four of these Buisson brothers, of whom three, Henry, Joseph, and Cyprian, took to rafting, and were very successful pilots and mas-

STEAMER C. J. CAFFREY

Rebuilt at Rock Island for Weyerhaeuser and Denkmann. Launched in 1875, in charge of Captain O. P. McMann of Clinton. She had a long and successful run

ters. Their quarter indian blood showed plainly in their looks and habits. All three were highly esteemed by their employers and associates on the river. Captain "Cyp's" last piloting was done for me on the large side-wheeler "Morning Star," running from Davenport to Saint Paul. I have never met a man who had more in him to admire and love.

Weyerhaeuser and Denkmann had the "C. J. Caffrey," a powerful raft-boat, rebuilt from the United States side-wheel snag-boat of the same name. Captain O. P. McMann, of Clinton, Iowa, was her master and pilot for many years.

W. J. Young and Company, of Clinton, Iowa, used the "J. W. Mills" as their family boat. She was not large, but was strong and well fitted up. Paul Kerz, of Galena, Illinois, was her captain. Later, when Young and Company built the "Douglas Boardman," a much larger and finer boat, Captain Kerz, and his excellent engineer, Conrad Kraus, also of Galena, were transferred to her, and for a time she was the family boat until the "W. J. Young, Jr." was built. She was the real queen of the raft-boats. Captain Kerz died in Galena in 1893.

Another fine, powerful boat was the "Blue Lodge," owned by the Clinton Lumber Company. She had been an Ohio river towboat. During the low water season, 1878, the Diamond Jo Line had her under charter towing grain in barges.

Captain Van Sant and the Musser Lumber Company of Muscatine, Iowa, had the comfortable steamer "Silver Wave," and she seldom made a trip north without a few "people in the cabin," as extras are called. Not only was Captain Van Sant a charming host, but her chef was equalled by none. I am sure Joe Gallenor's

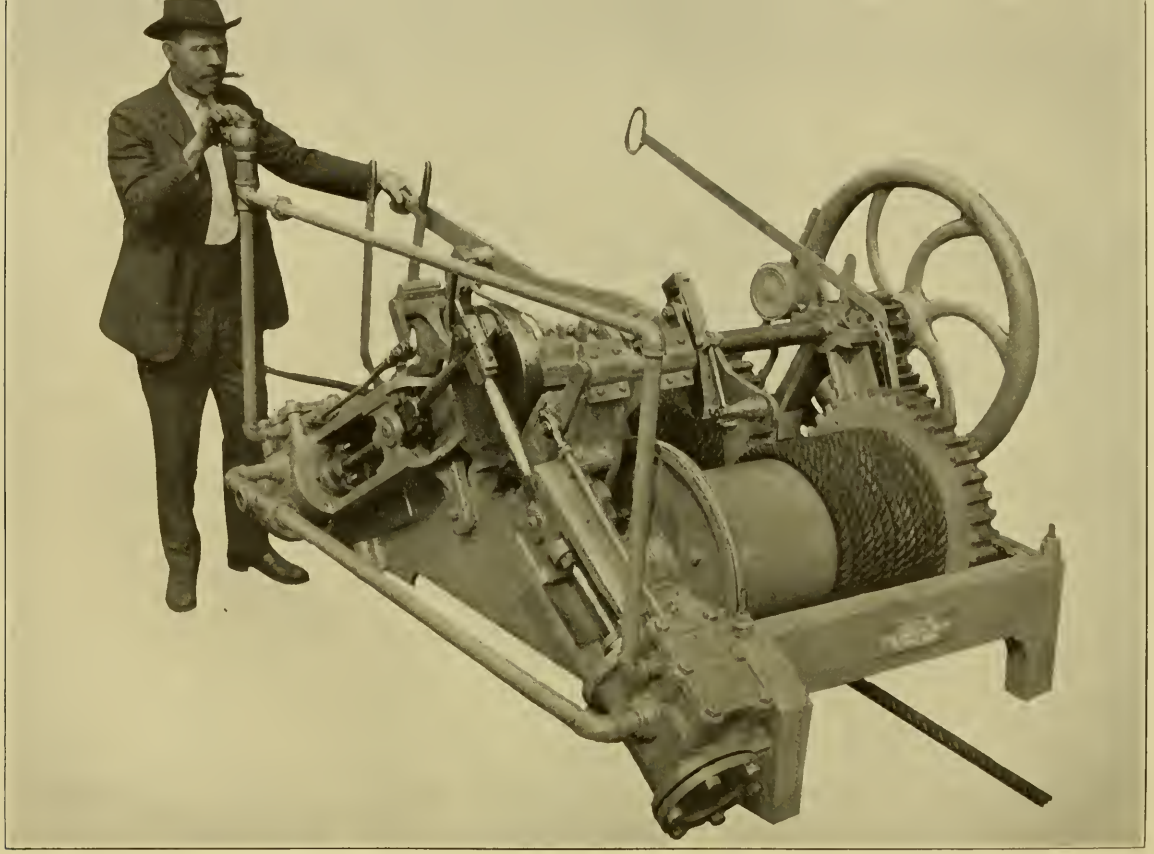
cooking had much to do with the popularity of the boat. I spent three busy and happy seasons on the "Silver Wave," and never failed to appreciate Joe's cooking. He was not expensive either, a poor cook is that, for so much is wasted, not eaten, but thrown down the "dollar hole," as they called the chute from the kitchen to the river.

Joe Gallenor was the most inveterate practical joker I ever knew. He played jokes on all of us. Time and again, when I was aroused before breakfast, someone would call "when did you get promoted?" and on turning my head around, would find a thin, warm pancake cosily resting on each shoulder, as epaulets. He had placed them there so quickly, as I was passing, that I had not noticed his act.

J. A. Hanley, now a dignified and successful lawyer in Davenport, Iowa, was our cabin-boy on the "Silver Wave" in those days. Of him I shall have more to say in the next chapter.

Captain A. R. Young, of Stillwater, Minnesota, had the largest and most powerful of all the raft-boats. She was called the "Tow-boat Minnesota," to distinguish her from the side-wheel steamer of the same name, a Saint Louis packet. Her engines were sixteen inches by six feet. She was used in floating-raft days, to tow fleets of rafts through Lakes Saint Croix and Pepin. While towing down river, Sam Hitchcock and Frank LePoint were her pilots.

Shulenburg and Boeckeler, of Saint Louis, had a splendid boat, the "Helene Shulenburg." That prince of good fellows, Captain Robert Dodds, of Saint Louis, was master of her, W. B. Milligan, of Davenport, chief engineer, and the genial, versatile James Henry Harris, his assistant. Harris always took great pride in keeping



THE CLINTON NIGGER

Invented by Chancy Lamb in 1874. The ends of the guy lines were made fast on the outside corners of the stern of the raft. By running this double-spooled "nigger," to which the guy lines were fastened, it paid out on one side and took in on the other and kept an even strain on the lines. By this "nigger" the towboat's stern was swung to either side and held in any desired position to control the movement of the raft

the engine-room well painted, with bright tools, shiny copper oil-cans, brass bell-pulls, and pictures, all as neat as a lady's parlor.

McDonald Brothers, of LaCrosse, Wisconsin, had a large fleet of raft-boats, but they made no effort to make them attractive for passengers, and seldom carried any. W. A. Suiter, their office manager and manager of their boat store, told me, in later years, that while he had handled all the business of the McDonald fleet for twenty-seven years, he had not ridden five miles on one of their boats.

When we had young people with us for a trip, they often wanted to go with me, in the large skiff, when we pulled ahead to get mail and supplies while the boat was backing some bend or double-tripping a bridge, or simply towing down river. In the latter case, we had a long pull on the oars to catch her.

One time, two fine young ladies from Muscatine, Iowa, were with us two full weeks while we made two short trips from Beef Slough to Lansing, Iowa, and then on to Muscatine. Being out so long from our base of supplies, I had to make many trips ashore to replenish our stores, and if in daytime or evening, the girls always wanted to go along. They always bought candy, nuts, or cigars for the two linesmen, so they made no complaint about the extra load to row.

One day, though, the girls didn't care to go, nor the next time either, and of course I did not urge them, much as I enjoyed their company. It was my first season on the "Silver Wave," and as one of the girls was the daughter of one of the part owners of the boat and the Lumber Company, I didn't want to be fresh.

I wondered, however, why those girls quit the shore trips, and was pleased when on our last two days out,

they asked permission to go again. Then I got the explanation. Joe Gallenor had told them that seriously he didn't think it safe for them to go with me. Pressed for a reason, he told them that I was subject to fits. "A good fellow, and we all like him. It's too bad, but–," he said, and Jim Hanley stood there and declared Joe to be telling the truth. Of course I forgave the culprits on the ground that they really meant no harm, but were just jealous, that was all.

In one party that we carried on the "LeClaire Belle" was a very fastidious maiden lady of mature years, one of those self-considered "unclaimed blessings." She was not satisfied until I gave up my room to her, and I then had to move in with the mate. The second morning out, she quietly and confidentially informed me that something had to be done to remedy the situation. She said she had been kept awake two whole nights by bed bugs, and she blushed deeply when she named them. I was sure she was mistaken, but thought it best to humor her and asked her what we could do to get rid of them. She told me to get a solution of corrosive sublimate and apply it with a feather to the mattress and springs. At LaCrosse I purchased a fifty cent bottle of the deadly mixture and took it back to the store room to Harry Carlton, the cabin-boy, telling him exactly where and how to use it. I then told Miss Thompson what I had done and that we hoped she would have a good night's rest. She did, and thanked me kindly, and she was my warm friend ever after.

But some time later, one dull day, we took everything off the store-room shelves to check up. Shipley found a bottle with a poison label, which had never been opened, and held it up, saying "What in h – – is this?" The cabin-boy turned red and confessed "Why that's

STEAMER CHARLOTTE BOECKELER

A large, powerful boat, owned by Shulenburg and Boeckeler of Saint Louis. Captain Robert Dodds, master and pilot. She was well built at New Albany, Ind., and came out in 1881. Her engines were fifteen inches by seven feet

the bed-bug poison the clerk bought at LaCrosse to kill the bugs in his room, but I forgot to use it." Shipley said, "Throw it in the river for we might make a mistake and get it in the pudding sauce, and make some of the rousters sick." "No," replied Harry, "it might make some of them sick, but no danger of it killing them. They could season their cabbage with paris green and enjoy it." We did not find any more bed-bugs on the boat, so I can safely recommend corrosive sublimate as an effective remedy.

The water was very low in August and September, 1878. Packets and raft-boats were having much trouble on the crossing from Queen's Bluff over to Hammond Chute (one of the mouths of Black river). Here the current, leaving the bluff, spread out over a wide, shallow bar. This situation was remedied by a long, low, cheap dam, of willow mattresses and broken rock, which narrowed the channel, and caused it to scour, or cut deeper.

This is the first "wing" dam I can recall. I think it was the first one on the Upper Mississippi. Its success led to the adoption of the system of improvement in vogue since that time. Wing dams, with their bases on shore and projecting out into the stream from one side of the river, or both, carry out the "jetty" plan of Captain Eads, which he used so successfully in deepening the channel through the South Pass into the Gulf of Mexico.

Now (in 1927) we have three hundred wing dams in the thirty miles between Prescott, Minnesota, and Saint Paul. There are over four hundred between Winona and Wabasha, Minnesota, a distance of forty miles, and they are quite numerous all the way down the Mississippi as far south as the mouth of the Missouri. In ad-

dition to these wing dams, many miles of shore protection work has been done to keep the banks from caving and falling in.

This work is done by first clearing the bank of trees and stumps, grading it down to a thirty degree slope, and then covering it with long, wide mattresses of willows, loaded down and held in place by a layer of eight to twelve inches of broken rock.

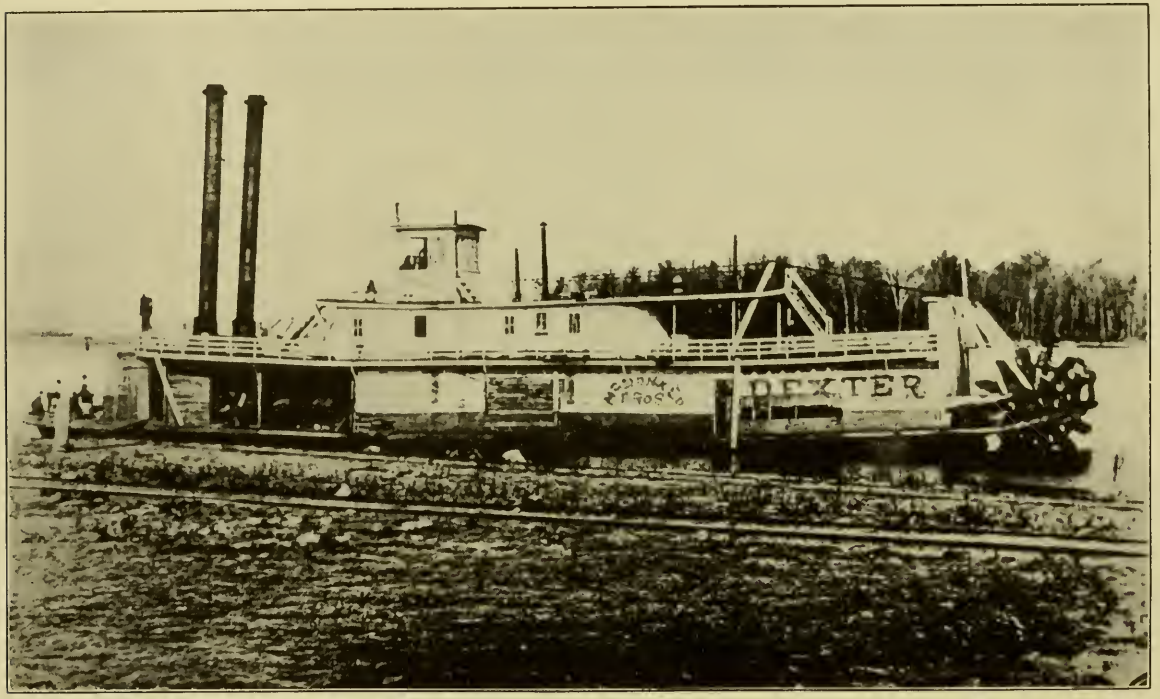
Now, boats are running close along a rocky shore, or past the ends of these hundreds of jetties. In many places, where they leave a channel only four hundred feet wide, safe navigation at night demands a thorough knowledge of the river, skill in steering and handling a boat, and a good searchlight to pick up the buoys that mark the ends of the most dangerous of the dams.

The improvement has given us a narrow, crooked, rocklined channel, deep enough for practical navigation through the low water season, but dangerous and difficult to run at all times.

When I began, there were no rocks in the river from Clinton, Iowa, to Saint Paul, and, in fair or good stages of water, the pilot followed up a shore until he came to a certain mark, a high-topped tree, a break in the timber, or the mouth of a slough or foot of an island, from where he would cross over to some object on the other shore, and so on, often following up one shore for many miles.

Nowadays, however, the pilot has his boat out in the middle of the stream finding his way between a lot of dams, covered with water, which flows over them thus hiding them, but not being deep enough to carry the boat over without sticking.

Had this improvement work not been done (even though much of it poorly carried out) there would



STEAMER DEXTER

This was an old boat when McDonald Bros. of LaCrosse added her to their rafting fleet in 1874 with Captain Peter O'Rourke in charge. She was dismantled at LaCrosse, Wis., 1887

have been no practical navigation of the Upper Mississippi except in time of high water. The large amount of sand and mud carried in by its northern tributaries would have formed in large, flat bars with very shallow water flowing over them. The river bed has filled up tremendously in my time. Many big sand-bars have formed and are now covered with timber, and more are forming. A channel has been maintained, largely, by contracting its width. They have nearly reached the limit in this direction. From now on, much money and energy will have to be expended in pumping new deposits out of the channel. Left alone, in three years this river will not be navigable at an ordinary stage of water, let alone during low water.

Why don't the United States engineers stop most of this inflow by protecting the soft, sandy banks of the Lower Chippewa and Wisconsin rivers from coming in and washing out into the sluggish Mississippi? A small amount spent in that way would help the situation greatly.

If a man had a cellar that had to be pumped out every time the water came down the gutters of his street, don't you think he would find the hole that was letting the water into his cellar, and plug the hole? I have never heard of a United States engineer suggesting any such remedy, nor will they consider it when someone else suggests it. They call for more money and more pumps. They don't want to save money. They all know how to spend it, and seem to enjoy so doing.

The Noted Raft-boat "Silver Wave"

After we put the "LeClaire Belle" with her broken shaft in charge of the Diamond Jo Boat Yard at Eagle Point in November, 1878, I paid off the crew, and took the boat books and my personal belongings to LeClaire, Iowa.

Arriving there on a Friday evening, I left the books at Captain Van Sant's residence and the next day secured comfortable quarters with a Mr. Wilson who lived five miles west of LeClaire. On Monday morning I began a four months' term of school at Browns Corners.

Mr. Wilson was director, as well as my landlord, and had three daughters (very nice girls) attending my school, so our relations were very intimate.

Mrs. Wilson was an excellent cook and a very pleasant, jolly woman. I enjoyed the winter very much. It was an excellent neighborhood. We had singing schools, spelling matches, debates, parties and dances for our evening diversion. The winter passed quickly and when school closed the river was open and the raft-boats were starting out.

Captain Van Sant placed me on the "Silver Wave" to fill the same positions I had on the "LeClaire Belle" in 1878. Captain George Rutherford was her master and pilot and to my great delight George Tromley, Sr., was on her as pilot so I could go right on with my pilot-house lessons.

The "Silver Wave" was a larger and heavier boat

than the "LeClaire Belle" and very hard to steer. Like most boats at that time she had two skeg rudders and only one balance rudder.

About this time someone in building a new boat gave her a basket stern with three balance rudders, and she was such a fine handler that no more skeg sterns were built and when hauled out for repairs all the old boats had their skegs removed and were given all balance rudders. When this change was later made on the "Silver Wave" it helped her greatly both in steering and backing.

When I joined her early in the spring of 1879, Henry Whitmore of Galena, Illinois, was chief engineer and James Davenport of LeClaire, his assistant. Dan Hanley, still living in Davenport, was our fireman and his younger brother James was cabin-boy and assistant to Joe Gallenor the cook, where he learned all kinds of mischief and devilment. "Jimmy" as we called him then, is now a dignified and successful lawyer in Davenport, Iowa, and he has not lost any of that spirit of devilment that kept the crew of the "Silver Wave" alternating between fun and fear while he and Joe Gallenor lost sleep in studying up some new trick or joke to put over on us.

Mr. Whitmore was not only an excellent engineer, but a fine mechanic. When a young man he spent four winters in the Broadway Machine Shop in Saint Louis, learning blacksmithing and machine work and he held the best jobs in the Galena and Minnesota Packet Company during its successful career.

During the first half of the season I stood watch with Mr. Davenport and had little to do with Mr. Whitmore as he did not seem very friendly. During late July and August we laid up three or four weeks as the

STEAMER SILVER WAVE

This steamer was originally called the D. A. McDonald. It was built at LeClaire, Iowa, in 1872. Owned by Van Sant and Musser Transportation Company of Muscatine, Iowa. The author was clerk and "nigger-runner," 1879-1881

low water would not permit rafting logs in Beef Slough. To fill in the time and partly cover the expense, we ran several short excursions. On one of these, an evening trip, with our boat full of merry dancers, she "ran through herself." That is, she broke the wrist pin on the port crank and this let the piston head, rod and pitman go forward with such force that the main cylinder on that side was cracked and ruined. This crash and the escaping steam caused quite a scare for a few minutes; but we kept them reasonably quiet and in a very short time Mr. Whitmore disengaged the broken engine, shut the steam off from it and was able to keep the boat going after a fashion on one engine and took us back to LeClaire, a little late but all right.

We had to remove the old engine and get a new cylinder cast by Williams, White and Company of Moline.

Before the new cylinder was ready, Captain Van Sant received word that the Chippewa river was rising, that rafting would be resumed in Beef Slough and to proceed at once to take care of Musser and Company's logs.

When the new cylinder came we worked two days and the intervening night getting it "shipped up." We hardly stopped to eat, and never mentioned sleep till we had her going up the river again. After this job Mr. Whitmore wanted me on his watch and arranged it so I stood watch with him the rest of that season and all the next. He took interest in showing me how to do things. I helped him at the forge and anvil, got to be his favorite striker, and was proud of it. We made all the stirrups for the wheel, and kept all the mate's raft tools in good shape, and during the summer he made

several fine hammers and finished them off as nice as any store goods.

We said Uncle Henry (as we called him) could make any tools required in the engine room but monkey wrenches.

In those days there was a great movement of "harvest hands" northward, from Missouri and Kansas to the great wheat fields of Minnesota. On one of our trips we picked up an even hundred of these men at five dollars each for Winona. This fare was for transportation only. They could sleep on deck anywhere and get sandwiches and coffee at the kitchen; only a few of them paid fifty cents for a full meal at the cabin table as they were out to earn and save money.

At noon the next day when passing Spechts Ferry, twelve miles above Dubuque, our main hog chain on the port side let go on top of the after main brace. This let her stern down on the side and put wheel, cranks, pitmans and engines in such a twist we could not roll the water wheel over.

The pilot headed her for the shore, her headway carried her there and the mate and crew got lines out to hold her.

Captain Sam Van Sant was riding up with us this trip fearing we might have some trouble with so many deck passengers.

When the boat was tied up he came back to see the situation at our end of her and he looked pretty blue.

Speaking to the engineer, he said, "Well, I guess the only thing to do is to send these men to Winona by rail and then have the boat towed to Dubuque Ways for repairs."

Mr. Whitmore said, "Captain, you do what I direct and give me some help and I'll see what we can do."

STEAMER MOUNTAIN BELLE

Originally a packet on the Kanawha river. Was brought into the rafting business in 1874 by Hewitt and Wood of LaCrosse, Wis. She was later owned by G. C. Hixson and then for several years by McDonald Brothers of LaCrosse. Her last years were spent in the excursion business at Saint Paul with Wm. McCraney as master and owner under the name of the Purchase. She had a long and successful career, and was finally condemned and dismantled by Peters and Son at Wabasha, 1917. She never had a bad mishap causing any great loss

The iron where it had broken was five inches wide and three-quarters thick and it was a clean job to weld it with our little outfit.

It was awfully hot, close in under the bluffs that afternoon, but before the supper bell rang we had her stern back up to place and the chain with that weld held her until she was dismantled many years later.

We had no trouble with our passengers and they made better time with us than if they had taken a regular packet that made frequent stops and handled considerable freight, and the five hundred dollars passage money they paid added just that much to the net profit of the trip.

Nearly all our work was running log rafts from Beef Slough, Wisconsin, to the Musser Lumber Company of Muscatine, Iowa, that owned a half interest in the "Silver Wave."

About this time The Musser Lumber Company and Captain Van Sant incorporated the "Van Sant and Musser Transportation Company" that continued to the end of the rafting business.

I remained with the "Silver Wave" three full seasons; two of them with Captain George Rutherford and one (1881) with Captain Lome Short who gave me great encouragement and opportunity to practice on the river and before the season was over he would let me "take her" anywhere night or day and fortunately I kept her out of trouble and made life easier for him.

We had very high water in the fall of 1881 and some landings were hard to make. On one trip we had a raft for the Clinton Lumber Company. At Dubuque I got orders from them to bring the raft "to our mill." Captain Short knowing the landing to be swift in high water had everybody up, skiffs and check lines ready

and the engineer had a clean fire and plenty of steam.

We got it landed at the mill all right early in the morning. Then the superintendent, Harry McGlynn, came down in ill humor and refused to receive the raft there; said they could not hold it, wanted it up above in Joyce's Slough and wanted to know "why in h- -l we didn't put it there." "Because your letter we got at Dubuque told us to bring it to the mill." He said, "Yes, but I wired you last night in care of the Sabula bridge to put it in Joyce's Slough." "Well, we did not get your telegram. Don't know why, but through no fault of ours the raft is here and we can't take it back up the river and don't intend to try, so here we are."

I went up-town and consulted a good, sensible lawyer, then returned to the Lumber Company's office and we compromised. They gave me a clear receipt in full for the raft "Where is as is." Then we agreed to leave our kit on and assist the steamers "Chancy Lamb" and "Lafayette Lamb" in putting the raft up in Joyce's Slough.

Taking one-half at a time and using all three boats we soon had both pieces up where they wanted them, when they put on their lines and we took ours off.

We were all down and coaled up ready to start back up the river before dark and everybody was in good humor.

That lawyer charged me three dollars for his advice. It was a good investment.

Before leaving Clinton that evening we got a newspaper account of the accident to the little steamer "Jennie Gilchrist" the night before. The Western Union Railway was under water between Hampton and Moline. The "Jennie Gilchrist" made a few trips carrying freight and passengers, while this condition existed,

and left Davenport about 8:30 P.M. with a few passengers and some freight on a barge. She passed up through the government bridge all right, but when about up to the location of the old railroad bridge she had a breakdown on one engine and before the engineer could get her cleared up to work the other engine alone, she drifted down to the government bridge, her upper works caught and she capsized. Some of the people were saved by getting on the barge and others were rescued by skiffs from shore, but there was some loss of life.

The "Jennie" was raised, repaired and had a long and useful career after this accident.

The "J. S. Keator" of Moline, Illinois, broke her shaft late in the season. We had finished our regular work and were ready to lay up for winter when we received orders to go to Gordon's bay for a raft that the "J. S. Keator" was going for when she broke down. The water was high, the weather nice and the "Silver Wave" made a quick and very profitable trip, the last in 1881.

The winters of 1881 and 1882 were my last experiences in teaching; my fourth in the same school at Browns Corners. I had grown to know and like everybody in the neighborhood. They were very kind to me and I had become so attached to the scholars that I left in the spring with genuine regret.

In addition to the many boat stores where we purchased supplies there was a well conducted wharf-boat at Bellevue, Iowa, that carried a good stock of boat supplies. It was in charge of a fine old man named Peter Shiplor who had been a clerk on the packets and knew how to cater to the steamboat trade.

It was handy to land at going up river as we could

get ice, meat, and provisions aboard in a very short time and Mr. Shiplor always had our mail ready for us.

Going down river we would always pull ahead in the skiff and tie up to the wharf-boat, load in our supplies and be ready to pull out to our steamer as she was towing by the town.

In 1880 there was an epidemic of small pox in Bellevue but we had not heard much of it while up river and on our way down I went ahead as usual with our skiff and got needed supplies.

It was nearly six o'clock when I got back to the boat. After I saw the stuff taken out of the boat and properly put away I went upstairs and took my seat at the supper table with the captain, engineer, mate and watchman.

Someone inquired if there was any truth in the rumors about a small pox epidemic in Bellevue.

I told them all I knew about it. That Ben Stuckey the watchman of the wharf-boat had had it and was now nursing others who were sick with it. That Big Jake the colored man who did the hauling for the wharf-boat, was very bad with it. They did not think he would live through the night. That Mr. Shiplor was having a hard time running the wharf-boat as no one would come to work with him. That it was pretty bad up town. There had been several deaths recently and a good many new cases. But I found myself alone at the table before I finished my story. I don't remember just what they did call me, but when the cabin-boy heard what I said he ran back to tell the cook and as a result I got no more waiting on and the other "watch" would not come to supper until I had left the table.

Then to make matters worse, we tied up two miles below Bellevue under a high bank and cooled down for

all night to clean boilers. After 9:30 P.M. all the crew except myself were in bed and asleep. I had to stand watch until midnight and then call my partner who would watch until breakfast.

I soon wrote up my log book, recorded a few bills paid that day and balanced my cash. It was very quiet and I soon got sleepy as I had missed my usual afternoon nap on account of business at Dubuque and Bellevue. To keep awake I got up and walked decks. About 11 P.M. I saw several lights coming down the road around the bend above us from the direction of Bellevue. A little later I could hear several voices back up on the high bank but they were not close enough to make out what they said. My curiosity was aroused and as the voices continued I cautiously walked the logs, got ashore and found a place where I could climb the high bank and found myself in a cemetery close to the party burying the latest victim of the small pox, Big Jake, the colored teamster from the wharf-boat.

When I roused my partner at midnight and got him up we had our lunch and casually I mentioned the affair I had witnessed in the cemetery and remarked "There may be another before morning. If you see lights and hear voices up there, you'll know what's doing." I said, "You knew Big Jake, didn't you, Jim?" "Yes, and I don't want to hear any more about him."

I suggested that perhaps it would be just as well not to mention the funeral to the crew when he called them at three o'clock to wash boilers and pump up, but when I got up for breakfast I found they knew it all and some were in favor of putting me ashore. Of course they couldn't do that, but I had my breakfast alone and no one wanted my company that day.

On long trips we received little mail and few papers. Only a few "Firebox reports" [1] and "Cook House" [2] dispatches were in circulation to kill the monotony.

Sometimes we made the run from Beef Slough to Muscatine without landing. After delivering our raft at Muscatine or elsewhere we got our kit off the raft and stowed on the boat and aside from stopping at LeClaire (usually) for coal we raced all the way back to Beef Slough without landing.

The "Silver Wave" could run well when she was in good trim. She needed a good load on her head. On one trip she ran from LeClaire to Beef Slough in twenty-nine hours and thirty-seven minutes. The distance is three hundred miles. This run has not been beaten by any raft-boat to my knowledge.

There was considerable racing with other boats in those days. Mr. Whitmore was always proud of his boat and did not want her passed.

If some one reported a "smoke ahead" he always got busy and wanted to get close enough to read the name even if he could not pass her.

The prevailing opinion is that racing on the river is dangerous. The movies generally show an explosion of boilers as a natural feature of a steamboat race. This is all wrong. The safest time to be on a boat is when she is in a race.

The engineer, firemen, mate, and watchman are awake and alert on the main deck. The pilot is taking pains to do his very best steering, the captain is in the pilot-house or close by to give any needed assistance and the rest of the crew even to the "slush cook" are inter-

[1] Unconfirmed "Steamboat news" attributed to the firemen.

[2] Unconfirmed "Steamboat news" attributed to the cooks.

ested and ready to "trim ship" or do anything else to help their boat win.

I have never known a boat to explode her boilers or have any serious accident while racing.

There have been a few explosions – not while racing – that could only be accounted for by the facts that engineers do sometimes get tired and sleepy and when conditions and tired nature are too harmonious, they do go asleep and the water in the boilers gets too low.

Steamboat boilers must be built according to United States laws, of the very best material and subjected to very rigid tests by the United States inspection service before they can be used. They must stand a cold water test one hundred and fifty per cent of the steam pressure then allowed. A set of boilers to carry one hundred and eighty pounds steam pressure must stand two hundred and seventy pounds water pressure test, and this test is applied at least once a year as long as they are in use.

If I thought boiler explosions a mystery I could not have slept so comfortably over them for fifty years.

Search lights or electric lighting had not come into use during the time I was learning the river. We had kerosene lamps and lanterns for lighting and the only thing we had to help the pilots landing at a bad place or hitching into the raft at night was the miserable old "torch basket." This was an iron basket about the size and shape of a ten-quart pail, that was hung on the end of five foot iron handle.

Using dry pine kindling cut up fine to get a good start we fed the torch with crushed resin a little at a time and then occasionally more wood.

This made a lot of smoke and some of the time a

pretty fair light, but it required close attention and at best was generally criticized by the captain and pilot on watch.

The watchmen were expected to have a barrel of kindling and a bucket of resin always ready so we could flame up the torch on short notice.

This would have been easy enough but for the cooks who frequently stole our stock to start or hurry up the fire in their big range.

After running two or three nights without landing, perhaps just as the watchman was nearly ready to turn in the whistle would blow for a wood pile and the "skipper" would call for the torch.

Rushing down to start it, it was no uncommon thing to find the kindling barrel empty and the resin pail nearly so. Frequently we would find part of the kindling and some of the resin behind the kitchen range. Of course when the cooks got up at 4:30 A.M. and discovered their supply (stolen from our stock) had vanished they made the air blue with all kinds of swearing and threats and tried to pin the whole thing on the watchman.

That torch was the one serious bugbear that made many nights miserable. After electric lights were installed the watchman led a different life.

During the three seasons I spent on the "Silver Wave" we only had one bad break-up.

Captain Rutherford tried to run Cassville Slough with the whole raft in the night and without any searchlight. Captain Van Sant was aboard that trip. He advised against trying to run it "whole." He urged Captain Rutherford to tie up and wait for daylight, but Captain Rutherford was always ambitious to make

time and kept on. We made the bends and other close places all right but came to grief at the head of the island nearly at the foot of the Slough, one corner caught on the island and the opposite corner on the stern caught the bar on the right and before we got the wreck landed in the last right hand bend at least one-fourth of our raft was floating off down the river. Then a dense fog settled down on us that did not lift until nine o'clock next morning.

By this time the mate had "the remains" patched up in good shape so the steamboat could handle backing, floating or towing along slow.

We had three skiff crews out catching and collecting the loose logs, many of which grounded on shallow places and had to be rolled to deeper water.

Leaving my partner to stand my watch running the nigger engine, I went with Captain Van Sant in one skiff. We had with us a big, husky negro who was riding down river with us. We soon had him in the water with a peavy and he did excellent work rolling off logs that were aground while we caught and brailed them together and towed them out to the raft when it came along. The day was warm and calm, a fine day for our purpose, and we cleaned up every log in sight as we went along.

We had no dinner, and it was 9:00 P.M. when the boat landed and we all gathered in.

Joe Gallenor had a fine supper for us and we certainly enjoyed it and the sleep afterward. I don't know who stood my watch that night, I was far away on the billow.

The next morning we started out again but we had secured the bulk of our logs the first day. We rowed

and floated along catching a stray now and then, the last one in Bellevue Slough, fifty-five miles from where the break-up occurred.

We had 1200 logs scattered over fifty-five miles of river. We recovered them all and delivered at Muscatine without any shortage and only one day late.

Captain Van Sant's presence was a great help to us in many ways. He knew what to do and had the happy faculty of knowing where to place each man in the right place and get the most work out of him. He earned the title cheerfully given him by the men on deck when they pronounced him "A Hero in a Break-up."

Captain Rutherford was on the "Silver Wave" six seasons and she made a lot of money in that time. He was not only an excellent pilot, but a man of intelligence and good principle.

One evening during a discussion in the pilot house something said prompted him to face me and placing a hand on each of my shoulders he said, "Young man, remember this:

> Life lays its burden on every man's shoulder,
> We each have a cross or a trial to bear,
> If we miss it in youth it will come when we're older
> And fit us as close as the garments we wear.

I thanked him and asked if he knew the author of this beautiful verse. He did not, nor do I.

We made one long, tedious trip with a raft of lumber from Reads Landing to Hannibal, in September and October, 1879. The river was very low and Beef Slough had closed down. We took this raft on charter, so much per day, which assured us of a fair profit. We grounded raft and boat at the mouth of Skunk river, seven miles below Burlington. By two days hard work

we got off in pieces. Then we lost two more days by wind, before getting away from this place. It was slow, hard work putting the raft through the canal as we had to cut it up in small pieces at each of the three locks in the old canal around the Lower or Des Moines rapids which ended at Keokuk.

We were twenty-eight days on the trip but after all our delays and mishaps I got a clear receipt for the raft from the agent of the Eau Claire Lumber Company when we turned it over to their steamer "Pete Kirns" at Hannibal. In fact he complimented us on the good condition of the raft and the time we had made with it.

As our pilots had not been running below Muscatine for a few years they sent me ahead to Davenport to secure a "posted pilot" to go down with us and show them the way.

Several of the large Saint Louis and Saint Paul packets had been laid up on account of the low stage of water and I was fortunate in getting David LeClaire who had been on the "Belle of LaCrosse" and was well posted. "Dave" LeClaire, then a very strong, healthy man about sixty-five years old, was a half-brother of Antoine LeClaire, the founder of Davenport, Iowa. I found him very intelligent and sociable. I enjoyed his company very much and told him so when he left us on our return to Davenport. That was Dave LeClaire's last trip. A few mornings later when his wife called him, he did not answer. He had made his last "crossing" to the other shore.

Racing between raft-boats going up the river (usually without anything in tow) was very common, but it was always interesting and often exciting though there was nothing at stake, except the pride of the crews in their respective boats.

Captain Van Sant was justly proud of the speed of the "Silver Wave" and the "Musser."

After we bought the "Ten Broeck" I soon discovered that when loaded just right she made excellent time going up river, but she would not stand crowding when heavily loaded as she did not have much free-board forward.

One night on backing out from a wood pile near Fishers island to go back up to Beef Slough for our second piece, I saw a boat coming up behind us and apparently gaining on us. I called down to James Stedman, the chief engineer, who was on watch, telling him we should try to keep ahead until we got up to the boom (about eight miles). By the time he and the fireman got a good fire and our usual steam, the other boat got up close, her bow even with our wheel and we saw she was the "Musser." Her pilot whistled to go by on the right but he did not go by. I kept well to my side of the channel, the "Ten Broeck" got her gait and gradually increased the gap between us and went into the mouth of Beef Slough four lengths ahead.

I warned our crew not to mention anything about it as the "Musser" may not have been in as good trim as the "Ten Broeck."

Now comes the funny part of it. On our next trip coming up we had a very heavy load of fuel and iron boom chains on the "Ten Broeck" when we landed at Winona and Captain Van Sant came on to ride up to Beef Slough with us.

While eating supper at the Winona dock the captain gave me and the engineer a very kind but serious talk about racing, said he would admit he had done a lot of it in his time, but could plainly see now that there was no sense in it, etc., etc.

TIGHTENING CROSSLINES WITH SPANISH WINDLASS

The lines holding the raft together and keeping it straight had to be frequently tightened in the manner shown. The Spanish Windlass consisted of two light poles about four inches through at the butt ends. One called the "upright," about six feet long, was firmly held in a vertical position by one man while another man carried about the ten-foot pole called the "sweep." The hitch caught in the bight of the loose line could in this way be wound around the upright until a good strain was secured and, held by the windlass, laid down flat.

We promised to remember his good advice. When we reached the upper end of town the new, fast "City of Winona" came out of the foot of the Slough above Youmans's mill and was soon headed up for the Beef Slough. She was gaining a little on us. Captain Sam was eagerly watching and soon asked Mr. Stedman, the engineer, how much steam he was carrying.

I answered, saying, "I have given orders not to carry over one hundred and twenty pounds tonight. Until we get these chains off her head, she will dive when she strikes a deep place if we drive her any."

By this time the "Winona" was close up to our wheel and gaining a little. Captain Sam could not stand it any longer. He said to Mr. Stedman and me – "Why this is a fast boat. It's a shame to hold her back this way. Let steam come up to her allowance and I will try to keep the water off her head"; and he got the crew to help him move some chains back; then he banked coils of cross lines around her bow with tarpaulins over her head and we kept ahead and gained a little even with slowing her down to mount the reefs in shallow water; but when near Fountain City the water came over her bow so strong that Captain Sam and his false bulkhead were washed back off her head. We then concluded we had had fun enough, slowed down, let the "Winona" go by, then cleared up the forecastle, put her back on one hundred and twenty pounds and turned in. "Racing" was not discussed when the captain came aboard after that.

Sometimes, however, we raced down stream with rafts in tow. I remember one such when on the "Le-Claire Belle" in 1878.

We had fourteen strings of logs for Fort Madison. The "J. W. Van Sant" (first) with fourteen strings of

lumber for Saint Louis, was close behind us when we got coupled up below the Clinton bridge, and it was soon apparent that she was gaining on us.

As the water was at a low stage and only one rapids boat, the "Prescott," at LeClaire to assist over the rapids, each captain wanted to reach LeClaire first and go on over with the "Prescott's" aid, as the second arrival would have a long delay.

The "LeClaire Belle" had fourteen-inch cylinders and the "Van Sant" only twelve-inch while both had the same stroke – four-foot. Not only did the "Belle" have twenty percent more power, but she was a much larger boat and we made every effort to keep ahead. By the time we were at Camanche we were side by each. And a few times the crews had to pry our boom logs loose from the lumber. Both boats were doing their best and so were their pilots, but there was no swearing or calling of ugly names – it was all as quiet and orderly as a well conducted funeral. That stretch of river then was wide enough for two full rafts to run abreast all the way to LeClaire. Neither crowded the other on shore or out on a bar; it was a fair test in every way and we were loser. It took over an hour before the "Van Sants" raft cleared ours at the head of Steamboat Slough. When we reached the LeClaire Foundry the "Van Sant" and the "Prescott" were starting over the rapids. We had to land and wait until the next day at noon.

While a lumber raft has more feet in it and weighs more than a log raft of the same length and width, it is easier to tow, because it is of uniform depth and the cribs and strings are coupled up close together, while the logs being of different sizes, the bottom of a log raft is very uneven and rough.

It takes longer to get a lumber raft under way or to

check its headway and stop it, but once under way the same boat or one of equal power, will shove fourteen strings of lumber one-fourth to one-half a mile an hour faster than she will fourteen strings of logs. In calm weather a lumber raft will float a little faster than one of logs.

The usual speed of a standard size raft towed by a boat of average power was four miles an hour except in Lakes Pepin or Saint Croix where it was only two and one-half miles an hour. The speed was considerably affected by the stages of water and the force and direction of the wind.

A pilot's reputation depended almost entirely on the time in which he made his trips, and there was constant effort to get all the speed possible and to lose as little time as possible at the bridges or at the rapids. The owners of the boats did not have to urge their pilots to "make time"; the rivalry between the pilots kept them all doing their best. It was racing against time and each other all season.

The engineers and mates deserved a large part of the credit for the good time made, but the captain, who was also first pilot, got the lion's share of it while the others got their full share of the blame if the boat lost any time, or was a little longer than usual on her trips. The rivalry between captains in the same line or on boats, owned by the same company, was sometimes bitter.

The LeClaire Navigation Company

In February, 1882, I drove into LeClaire, Iowa, one evening, when there was a meeting of the Pilots association, and took my examination for a pilot's license successfully and any member of the association was authorized to endorse my application.

In March I met the United States Local Inspectors at Rock Island. Captain G. W. Girdon of Galena, the Hull Inspector, gave me another examination which I passed without difficulty and soon after I secured my first issue dated March 15, 1882, signed by George W. Girdon, Inspector of Hulls, and John G. Scott, Inspector of Boilers.

This license authorized me to act as "Master of steam vessels on the Mississippi river, and its tributaries, and as Pilot navigating the Mississippi and Saint Croix rivers between Montrose, Iowa, and Stillwater, Minnesota, except the Rock Island rapids down stream."

The last issue of my license dated March 26, 1927, permits me to pilot on the Mississippi and Saint Croix rivers between St. Louis, Missouri, and Minneapolis and Stillwater, Minnesota, and the Illinois river from its mouth to Peoria.

In March, 1881, Captain Sam Van Sant who had a half interest in the little steamer "Last Chance" sold me a one-sixth interest for five hundred dollars. Captain John McCaffrey of LeClaire owned the other half interest, had charge of her and was to pick up what work he could get and pilot her himself.

At the end of the season I drew out four hundred and sixty-five dollars as my share of profit which was more than I had earned by seven and one-half months' work, and this made me eager to increase my holding.

Captain McCaffrey had the "Last Chance" hauled out on the LeClaire Ways for the winter and in February, 1882, Captain Van Sant and I bought McCaffrey's half and divided our interest evenly each owning a half.

The "Last Chance" was a small boat. She had a good boiler, but the engines were small – ten inches in diameter by three-foot stroke, and the cylinders were in bad shape. The hull was old but had had a good thick bottom put under her only three years before and she needed very little repairs otherwise.

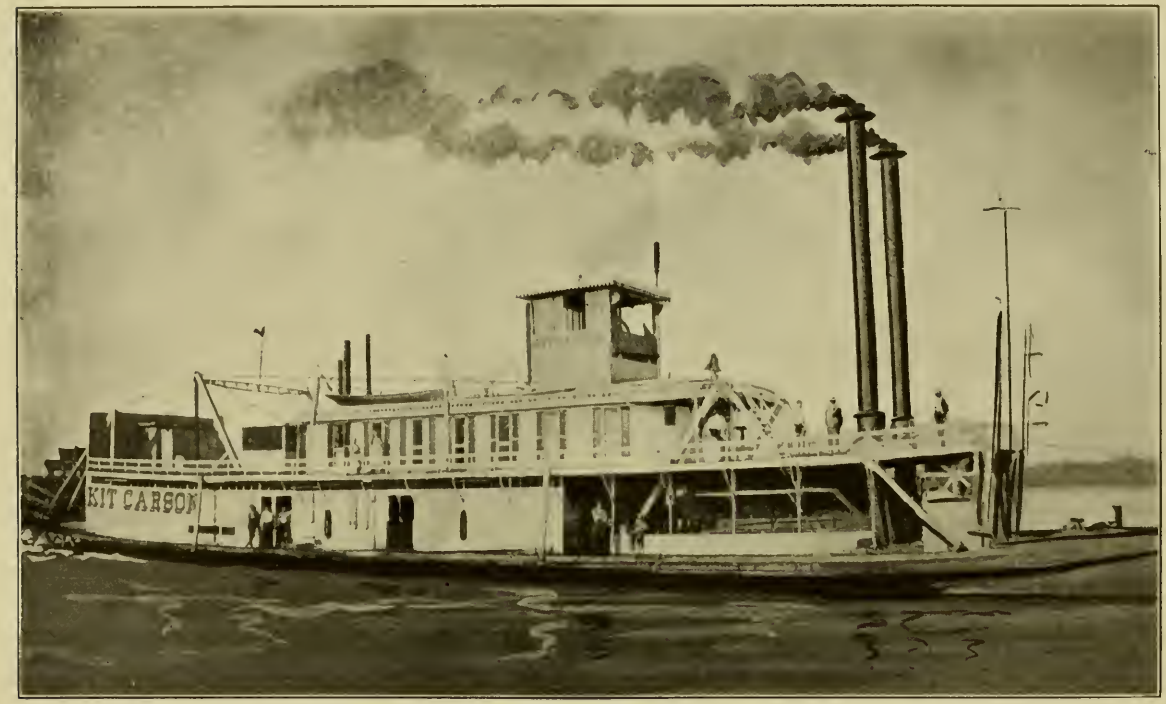
We secured new cylinders a little larger and used the same upper works. This and some valve grinding made quite an improvement in her movement.

As soon as I finished my term of school I secured a room at the Gault House in LeClaire and took real pleasure in working on my own boat, cleaning, painting, changing a little here and there to enable me to house, feed and sleep a crew of eighteen men.

I was fortunate in securing Robert Shannon as chief engineer and George O. Lancaster as his assistant. George was a good carpenter and a handy man in many ways in addition to being a good engineer.

I hired William Long for our cook and he was a handy man with carpenter tools also, so I started him in to remodel the kitchen and fit it up, as in the work the boat had been doing on the rapids her crew lived ashore and the so called kitchen was nothing but a small room with a stove in it.

With very little expense for material Mr. Long made a very handy little kitchen that just suited him and



STEAMER KIT CARSON

A large, powerful rafter with no unnecessary upper works to catch the wind. She was built at Stillwater, 1880, for Captain A. R. Young and the Burlington Lumber Company. Sam Hitchcock was her head pilot for several years. Then she was sold to J. C. Daniels of Keokuk, and Gara Denberg became her master and pilot. McDonald Brothers were her last owners in the rafting business. She was sold south and wore out at Memphis

pleased every cook who followed him. He was a great help to me in fitting up the cabin and pilot-house and when we got all done we were real cozy and comfortable.

Mr. J. W. Van Sant, Captain Sam's father, had retired from the boat yard but lived near it and visited it frequently when the work was rushing in spring.

I knew Mr. Van Sant to be an excellent ship carpenter and a man of superior judgment in repair work. So I sought his advice as to what work we should do on the hull of the "Last Chance." The instruction and suggestions he gave me on that job and others were of great value to me then and later when I had to superintend the repairs on a fleet of steamboats every winter.

J. W. Van Sant was a very modest, quiet man but he had a keen streak of humor.

One day he proposed to "set up the old spike heads that stuck out considerably on her old sides if I would get a boy to hold the spike set." I got a husky young chap whose father was a good carpenter in the yard. Mr. Van Sant did not use tobacco nor like it but he seldom indulged in any criticism of another's habits.

In moving from one berth to another Mr. Van Sant was always there with his maul ready and waiting for the young chap to take a chew and slowly get himself around in position.

Working just inside I heard Mr. Van Sant ask the boy, "Ben, did you ever see any snails?" The boy expectorated and asked, "What's 'at?"

"Did you ever see any snails?" "Yes, lots of 'em," said Ben.

"Well," said Mr. Van, "You must have met them, you never overtook any of them."

One stormy day in March, 1882, when it was too bad

for any one to work in the yard, Captain Sam Van Sant and I fired up the stove and organized the LeClaire Navigation Company of LeClaire, Iowa, that is by following the code of Iowa we got up our Articles of Incorporation which we later filed, and with two or three amendments providing for increases in our capital stock this organization carried us all right until the sawmills shut down and the business ended.

Starting with the "Last Chance" in 1882 we bought the larger "J. W. Mills" from W. J. Young and Company of Clinton, Iowa, in 1883, the big fine three-boiler towboat "Ten Broeck" from McCaffrey and Dodds at LeClaire in 1886. Then a year later we bought the "St. Croix" from Chr. Mueller of Davenport and also made a contract to tow and handle all his logs, take them away from Beef Slough or West Newton as fast as they were rafted out and store and deliver them as wanted at the mill. We were still running his logs when the old mill burned at the foot of Scott street and we ran every log cut by the new and larger mill at Cooks Point until they dismantled it.

Then in 1888 we bought the "Evansville," an old boat with new boilers, new pump, etc. She belonged to the Matt Clark Transportation Company, that failed. She was sold at Marshal's sale to John Robson of the Lansing Lumber Company which had a large bill against her for fuel.

As we had been running all the logs to this Lansing mill for several years we decided to take the "Evansville" at the price Mr. Robson had bid, for if he kept her he would have her run their logs. We put a good crew on her and started her out early in the spring of 1889, used her two seasons when we dismantled her and used her engines, shaft, pumps, nigger engine, capstan

STEAMER C. W. COWLES

This excellent rafter was built at Madison, Ind., 1881, for the Fleming Brothers of McGregor. Later she was owned by The Valley Navigation Company, with Joseph Buisson as master. Then Captain George Winans bought her and when he quit rafting sold her to the Deeres of Moline to tow their houseboat Narkatana. They put a new hull under the same cabin and named her Kalitan. She is in excellent condition today

and many other parts in completing the new "Volunteer" built at our yard at LeClaire.

The next year, 1889, we bought the "Netta Durant" of the Clinton Lumber Company and Captain A. E. Duncan, paying $10,000.00 for her. With her we got a contract for running all the logs cut by the Clinton Lumber Company mill, mostly from Stillwater, but this work did not last long as the mill shut down for good in 1890.

In February, 1890, we bought the "Iowa" of Gardiner, Batchelder and Welles of Lyons, Iowa, who gave us all their work (running logs) that they could not do with their steamer "Gardie Eastman." The "Iowa" was an old boat but had new boilers and very good engines.

This same year we bought one-third of the big new rapids boat "Irene D.", from the rapids pilot, D. F. Dorrance, who over-reached his means in building her. McDonald Brothers of LaCrosse, Wisconsin, took one-third and Disney and Son and Captain Dana Dorrance of LeClaire the remaining third. I was her manager. I made a contract with D. F. Dorrance to use her in his work on the rapids when low water came and McDonald Brothers and our company could throw most of our trips to her and also find some employment for her during good water stages.

We built the "Volunteer" at our LeClaire yard of which R. A. Edwards was manager, while Captain Van Sant and I owned one-half the stock. The "Volunteer" came out in 1891 and was a real success. She was light draft, she could follow the logs anywhere and was fast going up river and a fine handler.

She was one hundred and thirty-five feet long, had a twenty-four-foot beam and four-foot hold. Her engines

were thirteen and one-half inches in diameter and had a stroke of four and one-half feet. Her new boilers, built by Grupe and Murray of Davenport, were thirty-eight inches in diameter and twenty-eight feet long.

We bought the fine, fast, handsome steamer "Silver Crescent" of Captain O. P. McMann of Clinton, Iowa, in 1890 for $7000.00. Sold one-third to Van Sant and Musser Company and one-third to Captain Bob Mitchell of Clinton, Iowa, who took charge of her as master and pilot for two years.

After organizing the LeClaire Navigation Company we closed an arrangement with J. W. Rambo and J. N. Long, both expert rapids pilots, to use the "Last Chance" as their bowboat to help rafts down over the Rock Island rapids during low water. They were to have a percentage of her earnings while on this work.

Then we made a contract with the Hershey Lumber Company of Muscatine, Iowa, to run ten million feet of logs from Beef Slough to their mill for one dollar and ten cents per thousand feet. This work to begin as soon as Beef Slough began rafting.

With our boat repaired, painted and fitted up she passed a fine annual United States inspection and on orders from Manager Van Sant I got coal and provisions aboard and left LeClaire for Beef Slough on the night of April 17, 1882. I had Vetal Burrow, a French-Canadian, as my pilot; the engineers, Shannon and Lancaster, previously mentioned, James Shannon, mate, with seven good men on deck. Two men to be watchmen and nigger runners and two firemen, composed the operating crew. Then to complete the roster we had Will Long and his helper in charge of the kitchen and our little cabin. I furnished Will Long everything he asked for because I knew he would make good use of it,

and there would be no waste. Everything was good and nicely served and while he did not put on too many dishes at any one meal, he gave us a good variety from day to day.

A good cook with a kind, cheerful disposition is a great help to the captain; as he keeps the crew contented and happy. But such cooks are rare, very rare.

With the new engines a little larger than the old ones we were pleased with our speed up stream and she was easy on fuel.

The river was high from LaCrosse up, as Black river and Chippewa were both high. The big boats were taking six brails of logs – in two pieces of three brails each. We took four brails – in two pieces of two brails each – which made a raft one hundred and eighty feet wide and six hundred feet long, which was plenty for a small boat on the high stage of water.

I had never had much practice on running a raft. My education and experience had been confined to learning the river and to run a boat in it. To keep a big, heavy, long raft in the channel and off the high bars and heads of islands was something I had yet to learn.

Pilot Burrow was very helpful and on our first trip he did all the most difficult work like Betsey Slough, Raft channel, Bad Axe bend, Crooked Slough and Santa Fé; besides the bridges at Winona, LaCrosse, McGregor, Dubuque, Sabula, Clinton and Davenport.

You don't run any two of these bridges the same way and you can't run any one of them the same in all stages of water. The tow is too heavy for the towboat to stop. The current will carry it down though the boat may be backing her best, so to get through a bridge without injury you must start right and keep right.

We had a few narrow escapes on our first trip, but made Muscatine in good time and with the raft in fine shape; got a clear receipt and enough cash to pay off the crew and all bills and then "lit out" for Beef Slough again.

We ran three more of these four-brail rafts. Then we tried five brails – a two-brail piece and a three-brail piece, making a raft two hundred and twenty-five feet wide, and having good luck with this one, we ran five more like it and our work was highly satisfactory.

Then the river fell so much the heaviest boats could not follow their rafts down the shore at Sycamore (below LeClaire) and Pilots Long and Rambo called us to do rapids work. I reduced the crew to suit the job and this work gave me fine practice on the rapids, as I always took the boat back up even if night caught me on the way.

While boarding at the Gault House in the spring with an excellent family named Bard, I became greatly interested in the oldest daughter, Elizabeth, three years younger than myself. She had been teaching the "Indiana" school while I had been at "Browns Corners," two miles north. We did not meet out in the country as all winter activities were strictly neighborhood affairs.

Miss Bard's winter term closed a week later than mine, and on her return home she found me pretty well established, and I soon made up my mind that I wanted to be one of the family.

As Mother had taken our family to an inland town where they would have better educational advantages, I certainly enjoyed the homey atmosphere of the Gault House, and, my favorite place for tying up the "Last Chance" between trips while working on the rapids was directly in the rear of the house.

The crew used to say that I could put her in there, close up the pilot-house, ring off the engineer and be up with the girls on the back porch before the fireman and watchman got in the slack of the head line.

The river came up in September and we resumed our long trips and closed the season with a nice profit after paying for all improvements, repairs and new outfit we had put on her.

Pleasant Rafting with the Good "Ten Broeck"

The year 1882 was a busy and important one for me. Besides getting my license and beginning work on my own boat and helping organize the LeClaire Navigation Company as told in the preceding chapter, I was entered, passed, and raised to the degree of a Master Mason in Snow Lodge number forty-four in LeClaire, Iowa. After making permanent residence in Davenport, Iowa, I changed my membership to Trinity Lodge number two hundred and eight. I have been away from home too much to be an active member but after forty-five years' experience I hold masonic teaching and practice in high esteem and consider it a great influence for good in any community.

Miss Elizabeth Bard and I were married in her home on the evening of December 7, 1882. At the same time her sister Adele was married to John H. Laycock.

It was very cold and the heavy ice running made crossing the river difficult and dangerous. Captain and Mrs. Van Sant went up with me in a carriage in the afternoon and drove back with my plucky bride and me after midnight with the temperature twenty-six degrees below. The road, frozen hard, had smooth tracks and we were not long on the way to our cozy, furnished apartment, with a good hard-coal fire in the base-burner.

In February, 1883, we bought the towboat "J. W. Mills" of W. J. Young and Company for $7000.00.

We did not have to pay any cash down or spend any money repairing her. She had been out on the Eagle Point ways and given $2200.00 repair before lying up for winter.

Mr. Young now had two fine, large, new boats, the "Boardman" and "W. J. Young, Jr.", that would do the bulk of his work. We were to do all his extra work and let about one-third of the earnings thereon apply on our notes given for the "J. W. Mills."

I took charge of her and started out early. She cleared $4000.00 that season and $6000.00 in 1884, and $4700.00 in 1885, my last season on her. So she more than paid for herself in her first and second season.

In February, 1886, we bought the "Ten Broeck" and barge for $8250.00. This was a great bargain as the "Ten Broeck" was only six years old. She was one of the best in the business. Her engines were sixteen and one-half inches in diameter by four and one-half-foot stroke, fitted up with new piston packing and Frisbie balance valves.

She had three good boilers and was very easy on fuel.

She had a nice comfortable cabin for her crew and one large guest room.

The "Ten Broeck" was wide and low, caught very little wind. She was easy on the stern of the raft and had wonderful power in backing and flanking.

I went on her in the spring of 1886 leaving LeClaire twenty-four hours after a severe March blizzard that gave us ten inches of snow and a very cold night to start up river.

During the six seasons I was in charge of the "Ten Broeck"I had several good pilots who changed watches with me. Among them I hold John Monroe, John H. Wooders, George Tromley, Sr., Wm. Savage, Alf.

STEAMER TEN BROECK

This was a large, powerful rafter with three boilers, and engines seventeen inches by four and one-half feet. Built at Stillwater in 1882 for Gillispie and Harper. In 1886 The LeClaire Navigation Company bought her and the author took charge for six years. She was low and wide, very little affected by wind and would out-back or out-flank anything in the river. Photograph taken four miles below Lynxville, Wis.

Withrow, and Frank LePoint in grateful recollection for their skillful work, cheerful co-operation and genial companionship night and day. They were real partners. When you rouse a man out of his nice berth at 11 P.M. or 3 A.M. night after night to "take her" in any part of the river and battle with fog, wind and shoal water, you get a good clear line on his disposition all right.

My old friend Henry Whitmore was my chief engineer for the first season on the "Ten Broeck" and we enjoyed being together again.

Then James Stedman of LeClaire took charge of the engine-room in 1887 and remained with me until we left her at the close of the season in 1891.

Our company now had several boats and had to take care of all the Beef Slough or West Newton output for the Lansing Lumber Company of Lansing, Iowa, David Joyce of Lyons, Iowa, and Fulton, Illinois, Chr. Mueller of Davenport, besides supplying the Clinton Lumber Company, and W. J. Young and Company all above what he could handle with his own two boats. We had rented Wyalusing and Desota bays and some other storage places where we would put rafts not wanted at the mills in safe storage and where we could get them out and run them to the mills during low water when the rafting works were shut down.

Dropping rafts down one or two days run, shoving them up in some bay, taking off our kit and hiking back to Beef Slough for another raft to be similarly lined up and fitted to run, then taken down to Desota or Lansing and laid up and stripped was not as desirable as long through trips.

Then when we went after these logs in low water some were aground on the shore and required consider-

able rolling to get them afloat and placed in the raft again.

This laying up and getting out again cost about two hundred dollars per raft more than a trip straight through to the mill. Because I had the best boat and was familiar with all the places we were using for storage, the "Ten Broeck" got the bulk of this work, and her earnings were cut thereby; but in the six years I was on her she cleared $22,000.00. We had sustained a cut of ten cents per thousand feet on all logs to Clinton, Lyons and Fulton since 1885 and this made a big difference in profits.

I only had one real bad break-up while on the "Ten Broeck." This was in Lake Pepin, with a heavy raft of logs from Stillwater on Lake Saint Croix for Chr. Mueller of Davenport, late in October. The mate and his crew had double-boomed it all around the outside and put on extra lines to strengthen it, but this all counted for nothing when the storm struck us at daybreak when we were within one and one-half miles of shelter at the mouth of the Chippewa.

We had to let go and get the "Ten Broeck" away and out of the lake and our raft was reduced to single logs with all the bark worn off them. The bark and our entire kit of lines and poles were thrown up in a windrow on shore and it was a mean task to disentangle the mass or mess.

I got a regular rafting crew from Beef Slough to help us and in nine days hard work we had a new raft ready to start and lost only thirty-four logs.

This break-up occurred before we bought the "Netta Durant." She was about a mile behind us and got the same treatment. Her raft for the Clinton Lumber Com-

STEAMER W. J. YOUNG, JR.

A handsome rafter, built in 1883 for W. J. Young and Company of Clinton, Iowa. She is shown towing a half raft of logs. She was 160 feet long over all and 34 feet wide, with engines fourteen inches by six feet

pany was in single logs and clear of any bark the same as ours.

My last trip with the noble "Ten Broeck" was late in the fall of 1891 with a raft for Dimock Gould and Company of Moline from Stillwater to Lansing Bay where we had orders to lay it up for early spring delivery.

The first half of November was mild, clear and calm, but the river was low. We knew we would have to split below Prescott and double-trip past Four Mile island where the United States dredge had made a cut through the bar wide enough for a half raft.

When we got out of Lake Saint Croix in the morning and below Prescott we found Captain R. J. Wheeler with the steamer "Henrietta" and a large excursion barge, the "Robert Dodds" and raft in charge of Captain George Brasser and the "Menominee" and raft, Captain S. B. Withrow all tied up and lying quiet. I could see some small boat down below in the cut. So we landed on the right above the others. I took a skiff and visited the other boats, and learned that Dan Rice with his little side-wheeled "Bun Hersey" and half raft for Red Wing had caught his right hand bow corner on that side of the cut and then the stern swung over and rested on the sand on the other side. The captains all thought he would soon get loose and drop out of our way.

While the day was pleasant I knew how quickly that river could freeze up when it turns cold, and the water low, but I was behind all of them and could do nothing but wait for an opening.

When I got up the next morning, November 11, and could see no change in the situation, I took a skiff and went down to the "Bun Hersey" and took in the situa-

tion. On making inquiry of Captain Dan Rice, a big, rough-looking chap with his pants inside big, high boots, as to what his plans or intentions were, he told me that was his business not mine. I then went back up to the other boats and got the captains together and told them that if we waited on Rice to get out of our way, we would all freeze in here. "Let's go down together and hold an 'inquest' over him," was proposed. We went and Rice at first was surly and stubborn, but we convinced him be must act at once and he did as we suggested. He cut off that corner that was aground (about one hundred and twenty-five logs) and took his raft through the cut all right. By the close of the short day we were all through, coupled up and on our way for a good run through Lake Pepin.

We had two days of bad weather but got our raft safely placed in Lansing bay, hitched into our fuel barge, and "lit out" from Lansing at 2 A.M., on November 16, for LeClaire. It turned cold at dark when we passed Clinton. We reached LeClaire at 9:30 P.M.; put off surplus stores, took on coal, paid off the deck crew and cooks and early in the morning of the seventeenth with the "Irene D." hitched in alongside, made for Wapsie bay, ten miles up river. Wapsie Slough had frozen over during the night. We had to break our way in. It was a cold day to "Lay-up" and drain steamboats, but we did it, only stopping for coffee and sandwiches at noon.

We carried our baggage and walked ashore before night over the ice that had made again since we broke in earlier in the day.

That was my thirty-fifth birthday and a good hard one. By walking two and one-half miles to Folletts I caught a train to Noels Station. I was very hungry but

could not beg, buy or steal anything to eat. Rather than wait four hours for the night "accommodation" on the C. M. & St. P. to Davenport, I walked three and one-half miles to Long Grove where my old chum Ed. Owen was ticket agent. He took me to his house, made fresh coffee and saved my life. Reaching Davenport, I was too sore and stiff to walk and took a carriage.

I did not expect to go back on the "Ten Broeck" and though going home I left her as "a tried and faithful friend" that had carried me and our raft through many, many storms, fogs, shallow waters and crooked places all O.K.

One night going up the river on the "Ten Broeck" with our fuel barge in tow and changing watch at eleven o'clock above Apple river I said to Frank Le-Point who had just taken her (as pilot), "Frank, I think I see red and green lights up there near the mouth of the Maquoketa (river). In this moonlight the lights don't show very well, but I think he has a raft ahead of him; guess I will wait and see who it is."

In a few minutes Frank's keen Sioux indian eyes caught the situation and he said, "Why that man he's tied up. Now why you 'spose anybody tie up a raf' on such a night like dis. It mus' be Brasser (Captain George Brasser). He like dat landin." Sure enough! When we got up closer, by four short blasts from her whistle calling for help we recognized the raft-boat "Robert Dodds" of which George Brasser was master. Running in closer I called to ask what he wanted and could see the trouble before he answered: "Ho Cap! This dam fellar wit' his tie raf' run into me since I'm landed here and I can't move my boat – he's swung in across the Robert Dodd's wheel. I want you to pull him out of dis." There was a big man with a bass voice

moving around on the tie raft (from the Wisconsin river), whom I judged was the pilot (a "floater") and at my suggestion he made fast to his raft the end of a good line our mate threw out to him.

Then we slowly and carefully pulled him out of his predicament and swung him well into the channel and let him go, and we proceeded up river.

Six weeks later we landed at the office in Beef Slough to get our raft assignment. The "Robert Dodds" was landed there also and when I met Captain Brasser he had a merry twinkle in his mild blue eyes. After thanking me for the little service that night six weeks ago, he said, "I have good joke to tell you on my own self. On my las' trip down my engineer say those biler (boilers) need a clean out; so I tie up in same place I was that night you see us there. Well, sir, I was woke up along 'bout midnight and when I step out my room what you tink I see? Well my frien' there was another tie raf' in same shape like de one you pull out wit your boat dat I hail you in.

"Yas sir, and when I see big fellar walkin' towar's my boat I see was de same pilot; so I call out, I say my frien' aint dis river wide enough so you can get by me sometime when I'm clear over one side? An here's where de fun is on me. So soon I spik like dat he stop right where he was and in dat big voice he'es got he say, 'Gawd-A-Mighty! Are you here yit?' "

Once I had an Irish woman get a pretty good one on me.

We had lost a young chap on our last homeward trip with the "Silver Crescent." He was the cook's helper and lost his life by a foolish, risky caper, against which we had warned him several times.

The cook and clerk took his clothes and money due

him to his mother and gave her a full report of his loss.

I did not go to see her then, but offered a reward and notified the fishermen to be on the lookout when the ice went out in spring. I came down from LeClaire one day late in March and learned that Mike's body had been found and would be buried the next day. I drove over to see her, and with a rain coat and small cap on with my five feet seven inches in height in that outfit my appearance was not impressive.

I found the poor woman in tears. She had been telling a neighbor woman all about it and was naturally agitated, but when I gave her some money, saying, it was to enable her to make a good showing at the funeral, she wiped her eyes and a funny smile broke over her face when she said: "Well of all things! Are ye Captain Blair?" Well before God now I never would have thought it!"

"Why not," I said; "don't I look like I could run a steamboat?"

She put her hand up to her cheek and with laughing eyes said: "Well, ye must know back on the 'ould sod' where I was born, it was a busy seaport town. When I was a young girl in me teens I knew the captains of all the boats AND THEY WERE ALL LARGE, FINE-LOOKIN' MIN."

And one early spring day while the usual repair work kept me busy getting the many things needed from up town while waiting at Ripley and Second streets for a Rockingham car, I had my arms full of packages and a small coil of three-eighths Manila rope over my head and one shoulder.

An old German approaching said, "Cap, I don't like to see you with a rope like that. By Golly that's the size most of them use!"

"Don't worry!" I replied. "You never heard of an Irishman hanging himself."

"No? No that's true," he shot at me, "They don't have to – the sheriffs hangs them."

The Green Tree Hotel

In the lively days of the rafting business, in addition to its coal yards, boat yard, foundry and machine shop, boat stores and rapids boats and rapids pilots, LeClaire had a unique feature known as "the green tree hotel," a splendid elm whose spreading branches provided shade in sunshine and a shield in storm to many a cook, fireman or deckhand after he had had his little fling, and could find welcome and rest under the green tree until a berth appeared.

This grand old elm stands in the public landing, given by Antoine LeClaire to the town when it was laid out and named for him nearly a hundred years ago.

On any warm summer night it sheltered "the makins" of several raft-boat crews, and it didn't take long to get them either. No baggage to arrange, no bills to pay – just get up, put on the hat and follow.

The steamer "Jennie Gilchrist" seems to guard them while they sleep. She is busy every day towing barges of coal from the mines at Rapids City and ties up close to the green tree every night.

Coal was discovered in Happy Hollow near Hampton, Illinois, in 1869, by Thomas Tagg and William Barth. The next year, 1870, these same men, Tagg and Barth, discovered a vein of coal at Rapids City and Taylor Williams opened a mine and delivered coal in 1871.

Mr. H. M. Gilchrist from Wanlockhead, Scotland, and his son John, worked in this mine about two years

when they got hold of a vein of even better coal near by and opened "Wanlockhead Mines" in 1874.

H. M. Gilchrist was a man of great industry and push, with pleasant looks and manners, and with such good coal only one and one-half miles from the river he soon had the big end of the lucrative steamboat trade.

In order to handle his growing business he had the handsome little steamer "Jennie Gilchrist" built at the LeClaire yard. Taylor Williams had put in a railroad from the river up to their mines that served both, and Mr. Gilchrist provided and operated the steamer that did the towing for both the Gilchrist and the Williams mines.

The Williams mine was opened in 1871 and operated until closed in 1884.

The Gilchrist mine was opened in 1874 and worked out and closed in 1882.

I stated that the "Jennie Gilchrist" was a very pretty boat and very popular. This is true, and well she might be both, for she was named for Mr. Gilchrist's only daughter, now Mrs. Charles Shuler of Davenport.

The Green Tree

In writing of the green tree I recall one night in 1887 when on the "Ten Broeck," we landed at LeClaire for fuel, and awaited daylight before proceeding down over the rapids. It was after midnight and everything was closed up but two saloons.

I wanted a cook and was told that Hayden was the only one in town, and I could find him under the green tree. I looked over the bunch of sleepers under the tree and not finding Hayden I waked a fireman and asked

THE FAMOUS "GREEN TREE" AT LECLAIRE, IOWA

Reproduced from an original photograph taken in 1880. This elm's trunk is 13 feet in circumference and its branches have a spread of 93 feet. It is the only Iowa tree in the Hall of Fame. The little towboat shown is the Jennie Gilchrist

where Hayden was. He said he was sitting down close by the water's edge an hour ago.

I soon found him sitting there bareheaded and barefooted. By his husky voice I knew he was still drinking; so I left him there. I learned a few days later that soon after daylight he went up to the saloon in the basement under the drug store and asked the proprietor, "John, what kind of whiskey was that I drank last night?" "Why? What did it do to you?" "It made me go down to the river; sit down, take off my shoes and hat and gently put them afloat. Then I took a stick and pushed them out where they caught the current and I guess they are down to Hampton by this time. I thought I was launching a lot of barges. Wasn't that a great note?"

Only a few months ago I had a letter from a lady in Inglewood, California, asking for information about the green tree. This lady is gathering material for a history of noted trees and she says the green tree of LeClaire, Iowa, is one of the few trees that have places in the Hall of Fame in Washington, District of Columbia.

It has grown considerably since raftsmen used it for a summer hotel. Its trunk is now (1928) thirteen feet in circumference five feet from the ground, and its very thick top has a spread of ninety feet east and west and ninety-three feet north and south.

The townspeople take good care of it and it is in excellent health; and in summer nights when all else is still and only a slight warm breeze causes a murmur in its dense foliage, I can easily imagine it whispering the lines of my friend, Robert Rexdale's old refrain: "When the Mississippi was the Great Highway," and how I wished it could talk and tell about some of the splendid boats that had landed and often laid close to it

over night to run the rapids in the morning early before the wind came up. Of the lovely "Grey Eagle" in her bright spring suit like a bride in white with Captain Smith Harris so pleased and proud of her, on the roof as she backed out on that early spring morning in 1861, going swiftly to her death on the old Rock Island bridge.

And then of the "Favorite" that brought the Sioux captives to Camp McClellan after the massacre of New Ulm, Minnesota, in 1863. Captain Abe Hutchinson had two hundred and seventy-eight braves, sixteen squaws and two children to guard, feed and protect from the fury of the whites when he landed close to the tree for a rapids pilot.

Or of the fast "Gem City," three hundred feet long, that came out new in the spring of 1881 and made seven round trips between Saint Louis and Saint Paul in the first seven weeks; was full of people every trip and cleared her cost in her six months' run. Campbell Hunt and Hiram Beedle, Jr., were her pilots and steered her by hand as steam steering gear had not been introduced on the Mississippi then, but she did have a search light, the first on the upper river.

And then perhaps it would tell me about the great Streckfus and Jo. Long steamboat fight in 1896, when there were four fast boats in the Davenport and Clinton trade, each making a round trip a day, and carrying passengers for twenty-five cents one way or both.

The "Jo. Long," owned by Captain J. N. Long, the rapids pilot, and the "Winona," owned by Captain John Streckfus, left Davenport together every morning and left Clinton at 3 P.M. on the return trip to Davenport.

The "Douglas Boardman," chartered by Captain

Long, and the "Verne Swain," owned by Captain Streckfus, left Clinton every morning and left Davenport at 3 P.M. on the return trip to Clinton.

The "Verne Swain" had been alone in the trade since she came out new in 1880. She was fast and was kept on time like a train and was very popular. There was no railroad or interurban connecting Davenport and Clinton then. The "Verne" was a great convenience for travelers, shoppers, and those riding only for pleasure or recreation. Captain John Streckfus had been her sole owner since 1889 and he kept her up in excellent condition and built up a nice trade.

When Captain Long invaded his trade he (Streckfus) bought the new "Winona," another fast boat, and the fight soon became warm. Friends of the contestants in both terminals and all the intermediate towns were greatly interested; but feeling was roused to a higher pitch in LeClaire than anywhere else. Jo. Long was a LeClaire man and the "Jo. Long" was a LeClaire boat, and LeClaire boys and girls were on hand every day, forenoon and afternoon to greet and cheer their favorites when they made hurried landings often side by each.

Many heated discussions regarding the boats and their owners took place under the green tree during those long, hot summer days as the fight went on and thousands took the twenty-five cent rides every day.

But one afternoon in August the "Verne" was alone when she landed at LeClaire. The "Boardman," on which Captain Long was piloting, did not show up until nearly dark and then Captain Long was not on her. In an angry discussion on the Davenport Levee that day with James Osborn, long-time agent for the Diamond Jo Line, the Streckfus boats and the White Col-

lar and other lines, Captain Long stabbed Mr. Osborn with the pocket knife he had in his hand, and was arrested.

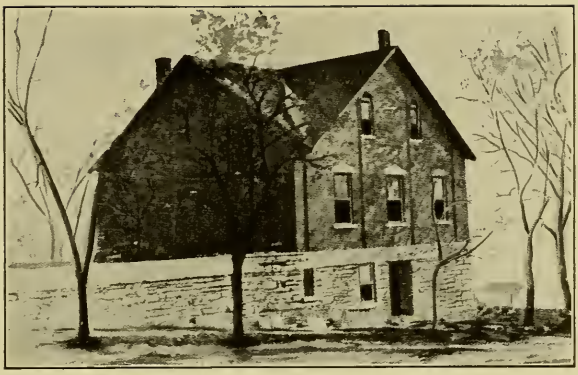
This unfortunate affair soon ended the steamboat fight in favor of the "Verne Swain" and "Winona" which took good care of the trade until the railroad and interurban were built.

The fact that with all the racing up and down every day, running the rapids up and down in all kinds of weather and with the crews and passengers often greatly excited, there was no accident to any of the boats, surely means there was a lot of good steamboating done on both sides.

And I'd like to hear it tell about the great fight between Commodore Davidson and the old established Northern Line in the Saint Louis and Saint Paul trade when it was cheaper to travel on these fine boats than to stay at home. Five large side-wheel steamers came out new in April, 1870. The "Red Wing" had the year 1870 in bright red letters beautifully shaded on the center of her wheel houses above her name.

She replaced the once famous but old and dismantled "Sucker State," and handsome Captain Wm. P. Hight and his excellent crew which included Charlie Manning and Billy Wood, pilots, "Judge" Brady, clerk, and Moses Mullen, mate, that had made the old boat so popular and profitable, came out on the new and larger "Red Wing."

And the "Lake Superior," successor to the "Key City," was a handsome boat, considerably larger than the old boat but lacking her speed. Every stateroom door in her long cabin had a landscape in oil showing some beauty spot on the Upper river. She was in charge



Residence of Brigham Young, Nauvoo, Ill., 1845

Old Home of the Mormon Prophet, Joseph Smith
Still standing in Nauvoo, Ill.

of Captain Jones L. Worden and several of his crew from the old boat.

The "Belle of LaCrosse," "Alex. Mitchell," and "Northwestern," that came out in 1870 for the White Collar or Davidson Line, were large, fine boats and the "Northwestern" with larger engines than any of the others, was a very fast boat.

These five new boats with the "Phil. Sheridan" and "Milwaukee" of Davidson's and the "Minnesota," "Minneapolis," "Dubuque," "Muscatine" and "Davenport" of the Northern Line gave an excellent daily service between Saint Louis and Saint Paul, and there was no more racing and fighting.

The compromise and consolidation however gave the Davidsons the control and they kept it. If the boats made any profit they got it.

The Northern Line put into the consolidation fourteen good side-wheel and five stern-wheel steamers, all in good condition, with forty oak model barges and $60,000.00 balance in the Boatmens Bank in Saint Louis.

They never got any dividends after the consolidation and were glad to give up their stock to escape the assessments that were levied against them later.

While these twelve fine boats were running in the seventies, they maintained quite a regular schedule – thus when the boat from Saint Louis would come round the bend about 4 P.M. to land at the green tree, the smoke of the other coming from Saint Paul was usually in sight. John Smith of LeClaire and Andrew Coleman of Davenport were their rapids pilots. With these regular packets to take care of first, they caught many outside trips, as there were numerous freight steamers running without schedule; and some years many large

towboats from the Ohio and Lower Mississippi towing ice to Saint Louis. Smith and Coleman had the cream of the work.

The old tree must feel very lonely these quiet nights when it recalls some of those busy nights in the seventies or eighties when two or three rafters, a big ice towboat like the "E. M. Norton," "Beaver" or "Jack Frost," and a big freighter with three barges of grain were all coaling and getting on provisions, ice and other supplies at the LeClaire Landing within a block of the green tree that saw them all come and all go.

It has a quiet but steady companion for company now; since Captain J. D. Barnes of LeClaire placed a cut stone marker on the Public Landing close to the tree in memory of an old playmate who was born only two miles away. Captain Joe Barnes is a veteran of the Civil war. He and David Carr of Davenport are the only survivors of the crew that made the first and only rafting trip made by the little steamer "LeClaire" of LeClaire, Iowa, in 1866.

Captain Barnes was very proud of his old playmate who gained distinction as a hunter, scout and showman; well known and highly honored on both sides of the Atlantic.

The stone bears this inscription:

DEDICATED TO
COLONEL WILLIAM F. CODY
"BUFFALO BILL"

BY HIS FRIEND AND
BOYHOOD PLAYMATE
JOE BARNES

Erected 1924

On the north side of the tree is a large cannon pointing out over the river.

Through the effort of Mr. F. P. Schworm of LeClaire and the influence of George M. Curtis of Clinton who then represented the district in congress, this cannon was given by the war department to John R. Buckman post, G. A. R. Before the post disbanded a few years ago it gave this cannon to the town of LeClaire and it rests under the shadow of the green tree as lasting memorial to her veterans of the Civil war.

Monuments

FORT ARMSTRONG: On the extreme western end of the Rock Island is an accurate replica of the old block house which was a feature of old Fort Armstrong, built in 1816 and abandoned in 1836.

This replica was erected through the efforts of the local chapter of the D. A. R.

They got the description and measurements of the original from records in the war department at Washington.

They also secured the old abutment of the first railroad bridge to cross the Mississippi river and the commandant of the arsenal gave generous aid in restoring and marking it.

ABUTMENTS OF OLD BRIDGE: It stands about fifty rods up-stream (N.E.) from the present government draw bridge. This abutment carried the south end of the old wooden bridge built in 1855 for the Chicago, Rock Island and Pacific Railway. It was the bridge on which the steamers "Effie Afton" and "Grey Eagle" were wrecked.

Hannah Caldwell Chapter D. A. R. of Davenport re-

cently placed a marker and bronze tablet on the Iowa abutment of this same old infamous bridge.

CAMP McCLELLAN: The same chapter also placed a boulder with a bronze tablet at the east end of Lindsay park to mark the landing and entrance to Camp McClellan which was a very busy rendezvous camp and hospital for Iowa troops during the Civil war. This marker is close to the river at the upper end of Stubbs's Eddy – East Davenport, and is in sight from the upper deck of passing steamers.

CAMPBELLS ISLAND: On the channel side of Campbells Island, just half way between Davenport and LeClaire, may be seen the fine monument marking the Battle of Campbells Island, fought on July 19, 1814.

An expedition sent from Saint Louis, Missouri, in three keel-boats, commanded by Lieutenant John Campbell, to relieve our garrison at Fort Shelby, was attacked at this point and badly defeated by Black Hawk and his Sac and Fox warriors.

The strong west wind carried the keel-boats on the flat shore. The indians had the advantage and killed ten regulars, four rangers, one woman and one child. One keel-boat was burned. The defeated expedition went back down river in the other two keel-boats.

This monument was erected by the state of Illinois, through the persistent efforts of the late William A. Meese of Moline, Illinois, who did so much excellent work in digging up a lot of interesting local history.

During the years I was doing so much work on the rapids, I asked all the regular rapids pilots and any one else that seemed acquainted with the locality, how the island got the name; but I never learned anything about it until my friend Meese sent me a copy of *The Battle of Campbells Island*, by William A. Meese of Moline,

Illinois – 1904. The island was named for Lieutenant John Campbell who commanded the United States troops.

JULIAN DUBUQUE: On the river end of a high bluff two miles below the city named after him, is a large, high stone tower which encloses and marks the tomb of Julian Dubuque.

In *A History of the People of Iowa*, pages thirty-six, thirty-seven and sixty-seven, Cyrenus Cole tells us that Dubuque was the most picturesque figure in the early history of Iowa. He was a well educated French-Canadian from Quebec. In 1785, when twenty-three years of age, he crossed the Mississippi and made friends with the Fox indians under Kettle Chief and secured their title to a tract of land with twenty-one miles frontage on the river and extending back nine miles. He proceeded to develop the lead mines in his tract and built a smelting furnace at the mouth of Catfish creek just above where the tomb stands. He opened up a big trade with the indians and miners and by 1800 was about the best customer Saint Louis merchants had in the upper country.

Doing a large business over a large territory he made many losses and at the time of his death in March, 1810, all his lands were mortgaged to Chouteau of Saint Louis.

When the United States courts invalidated Dubuque's title from the Fox chief, and Carondelet, the Spanish Governor-general at Saint Louis, Chouteau was a big loser of all his advances to keep Dubuque going.

FATHER JAMES MARQUETTE: In recent years the people of Prairie Du Chien, Wisconsin, with some help from the C. M. & St. P. Railway erected a noble

monument in memory of Marquette, who with Joliet crossed over from Green Bay to the Wisconsin river in 1673 and descended in its rapid current to its junction with the Mississippi and on down that stream to the mouth of the Arkansas river. It is near the little federal cemetery and not far from the ruins of Fort Crawford.

OLD FORT MADISON: Close by the railroad tracks running parallel with the river (and close by it) in the Upper end of Fort Madison, Iowa, there stands a rather odd looking monument of stone with this inscription:

ERECTED 1908
by
JEAN ESPY CHAPTER
DAUGHTERS OF THE AMERICAN REVOLUTION
ON THE SITE OF
OLD FORT MADISON
Built 1808
Evacuated and Burned
By Its Garrison – 1813

Through the kindness of Mr. F. A. Amborn of Fort Madison, I secured the following information from the official write-up in the Fort Madison public library:

"Where the city of Fort Madison, Lee County, Iowa, now is, once stood a fort with three block houses. The historic fort was close to the Mississippi river and about one-third of a mile from the present Iowa State penitentiary. When it was built in 1808, the country round about was a wilderness. Through the forest and up the river the indians spread news that the government was erecting a fort within their territory, and they consulted together to destroy it. Attack after attack was made on the little garrison until in 1813 the soldiers set fire to the fort and made their escape through the tunnel or covered passageway to the river. The fire left

only this tunnel to the river and a tall stone chimney to mark the location of Fort Madison.

"This chimney was reproduced by the Jean Espy chapter of D. A. R. at their expense and stands on the same spot as the original chimney."

CHIEF KEOKUK: In Rand Park, Keokuk, Iowa, near the edge of the steep bluff, facing the lake, is a large bronze statue of Keokuk the noted chief of the Sacs and Foxes.

This handsome monument was erected by popular subscription through the efforts of Keokuk chapter of the D. A. R. It was unveiled October 22, 1913.

The inscription on the front (river) side reads:

CHIEF KEOKUK
Born at Rock Island, 1788
Died April, 1848

In 1883, Keokuk's remains and the marble slab which marked their location in Franklin county, Kansas, were brought to the city of his name and given suitable location here. On one side of the base is a bronze tablet placed there by the ladies of the D. A. R. in memory of the pioneers who entered Iowa through the "gate city" traveling on what was then known as the beginning of the "mormon trail."

They crossed the prairies as of old
The pilgrims crossed the sea
To make the west as they the east
The homestead of the free.

D. A. R.

The above description of this conspicuous monument came from Captain Hugh McKenzie of Keokuk, who made a special trip out to Rand park on a cold morning, to get the facts to help make my record complete.

I take this opportunity to thank him for his kind, intelligent interest in this work.

I hope those who read this chapter with any interest will watch for all these markers and monuments which aim to link the present with the vanishing past, in passing by them.

WARSAW, ILLINOIS – FORT EDWARDS: There is a tall stone shaft on the high bluff point at the upper end of Warsaw, Illinois.

From our former agent in Warsaw, Mr. W. J. Clippert, I secured these facts.

This shaft of Bedford stone, fifty-four feet in height, was erected by the state and some local subscriptions in September, 1914, to commemorate the establishment of Fort Edwards, built by Major Zachary Taylor and the third United States infantry in September, 1814.

From this bluff, directly across from the mouth of the Des Moines river and only four miles from the foot of the lower rapids, the movements of indians, going to, or returning from their great hunting grounds, could be easily watched and local traders protected.

After Fort Armstrong and Fort Crawford were built, Fort Edwards was not needed and in 1824 it was abandoned.

GENERAL GEORGE ROGERS CLARK: On a high projecting point of one of the bluffs in Riverside park at the north end of Quincy, Illinois, there stands a noble statue of General George Rogers Clark of Louisville, Kentucky; erected by the state of Illinois to honor the memory of this remarkable man whose services, sufferings and sacrifices during the revolution, added to the union that vast territory lying between the Ohio river, the Great Lakes, the Mississippi river and the Allegheny mountains.

Five great states, Ohio, Indiana, Illinois, Michigan and Wisconsin must look back to Clark's victories at Kaskaskia and Vincennes for their titles. No American of his day had such influence over the indians. They both feared and trusted him. He could punish them or treat with them when others failed. They had great respect for the "big chief of the long knives."

This statue represents him as looking out over the bay and across the river and into the great west that was explored later by his brother William and Merriwether Lewis to be added to the Union as "the Louisiana purchase."

MARK TWAIN: Close to the edge of the high bluff and about four hundred yards above the Wabash Railway bridge stands an heroic statue of Mark Twain in Riverview park, Hannibal, Missouri.

The inscription tells us that it was erected by the state of Missouri in 1913.

This fine statue in Mark's boyhood hometown is in plain view of passing steamers.

At the head of Main street in Hannibal where it runs up against the same bluff are beautiful bronze statues of Tom Sawyer and Huckleberry Finn, recently presented to the city (May 27, 1926) by Mr. and Mrs. George A. Mahan and their son, Dulany Mahan.

I know of no other monument erected to purely literary characters.

The old home of Mark Twain is only three blocks away, and is kept open to the public.

Mark Twain was a humorist and a pilot. He was not a prophet; hence he was honored in his own country.

ELIJAH P. LOVEJOY: The most pretentious monument along the river is the Lovejoy memorial in Alton, Illinois. This granite column ninety-three feet in height,

rising from an ample base, is surmounted by a bronze statue of Victory, seventeen feet high, weighing 8700 pounds.

The cost of this memorial was thirty thousand dollars, of which the state of Illinois paid five-sixths and patriotic citizens of Alton the remainder.

There is a medallion of Lovejoy on the south front and below it this inscription:

ELIJAH P. LOVEJOY
Editor of Alton Observer,
Albion, Maine, November 8, 1802
Alton, Illinois, November 7, 1837
A MARTYR TO LIBERTY
I have sworn eternal opposition to slavery and
by the blessing of God, I will never go back.

Look up in "Americana" the whole story of the tragedy on which this beautiful memorial is founded.

Lovejoy was killed, his press thrown in the river and the building burned by a mob, on account of his articles denouncing slavery and showing its actual abuses.

WHEN THE MISSISSIPPI WAS THE GREAT HIGHWAY

I'm a guest on shore with you gents tonight,
Where the smoke is thick and the wine is bright.

But my thoughts go back to the long ago,
And the river that sings to the sea below!

I'll tell you the story as best I can,
For I'm only a weather-worn river man.

But the world was sweet and its joys were real,
To the men who stood at the steering wheel;

And I've not forgot how it used to be,
In the good old days that are gone for me.

For the pulse beat fast and the heart was gay
When the Mississippi was the great highway!

Ah! those were the days when the red blood ran
In the fevered veins of a river man,

And those were the days when your honor, sah,
Meant more than it does in the days that are!

If a slur was cast on a woman's name,
Or the lie was passed in a poker game,

It was knife to knife ere the morning sun,
And a new-made grave for the weaker one.

I carry the mark of a bowie here,
In a long, red scar near the larboard ear,

For we fought together at break of day,
When the Mississippi was the great highway!

If I sigh sometimes for the vanished years,
And my eyes grow dim with the mist of tears,

It is not because of the changing ways,
And it's not regret for the river days!

But I miss the ones who have gone to sleep,
Where the hills dip down to the waters deep,

And I mourn a friend who in life was rare –
Old Davy Tip who is anchored there.

They were true to me as the stars are true,
And their smiles like sunshine sifted through,

To brighten the gloom of a stormy day,
When the Mississippi was the great highway!

So I dream tonight o'er my pipe and glass –
A dream of the boats as they used to pass;

The song of the river's in everything,
As the whistle blows for the bridge to swing!

I can see the lights as we're drifting down –
The lights of home in the sleeping town,

And I miss the crews that will sail no more,
As I miss the face of a girl on shore.

But I pledge them all in the sparkling wine,
As memory singeth of auld lang syne,

And I drink to years ere the head was gray,
When the Mississippi was the great highway!

ROBERT REXDALE

Rock Island, Ill.

What Became of the Raft-boats

One wonders what became of the seventy-odd rafters so busily, and many of them profitably, engaged in 1893. The decline was rapid. The end was in sight. Logging on Black river gave out first; then the Saint Croix and West Newton quit. Only four entirely new rafters were built after 1893. A few old ones were rebuilt. The "Glenmont" had a new and wider hull built at the Eagle Point yard. The "Glenmont's" cabin, engines and boilers were placed on it and she came out as the "North Star."

Captain George Winans who had bought the "Dan Thayer," rebuilt her at Lyons, I think, putting the "Thayer's" engines, boilers, shaft, etc., on a wider hull with a very nice cabin and she came out as the "John H. Douglas," later changed to "Saturn." The "City of Winona" was rebuilt at Kahlkes yard in Rock Island, given a new and wider hull and called the "Winona."

The "Netta Durant" was rebuilt at our yard in LeClaire, given a larger hull and very small cabin and came out as the "Lydia Van Sant." The "Park Bluff" was rebuilt, given a larger hull and named the "Harriet."

The "West Rambo" was rebuilt at the Wabasha yard and came out the "Virginia" and later went to Florida.

The "Lily Turner" was rebuilt at Kahlkes yard in Rock Island and came out with a wider hull with little or no cabin and named "Mascot."

After 1893, many of the pilots used bow-boats. The "Saturn" had the "Pathfinder." The "Moline" used the "Mascot." The "North Star" used the "Harriet." The "J. W. Van Sant" had the "Lydia Van Sant." The "Rutledge" had the "H. C. Brockman," and the "Denkmann" had the "R. D. Kendall." The "Staples" used the "Lafe Lamb" or the "Georgie S.", and the "B. Hershey" used the "Everett." The "Kit Carson" or the "Lumberman" used the "Gipsey."

Using a bow-boat they could run longer rafts and make better time. The bow-boat helped get through the bridges and over the rapids in shorter time, and in the lakes she would get back on the stern and help push.

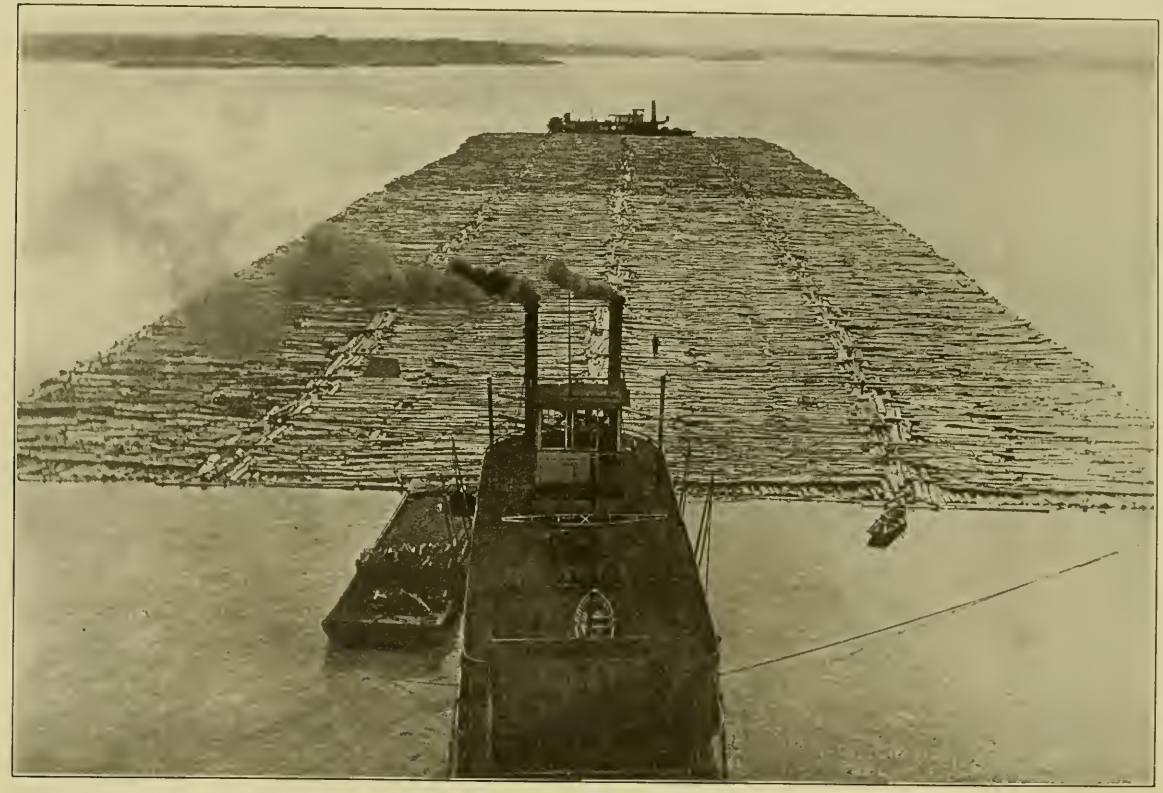
Taking larger rafts required fewer large boats and they decreased in number steadily and after "West Newton" quit rafting out logs in 1904 those few remaining were soon sold or otherwise disposed of as others had been during the preceding ten years.

The "Charlotte Boeckeler" was sold to a Cairo concern and was engaged in general towing on the lower Mississippi with her name changed to "J. H. Freind" and later sold to the Barrett Line and her name changed to "Mamie Barrett."

The "Helene Shulenburg" was last used in excursion work by Captain John McCaffrey and his sons, sank at Credit Island and was dismantled at Rock Island.

The "Robert Dodds" was sold to an Ohio river party and ended her career towing "show boats." These transactions cleaned up the Shulenburg and Boeckeler fleet.

J. C. Daniels of Keokuk sold the "Lumberman" to Captain Bradley of Cairo and she worked around Cairo several years as the "Fritz." He sold the "Kit Carson" late in the day to the LaCrosse Mississippi River Towing Company and she was finally sold to a



STEAMER J. W. VAN SANT II

Towing a "double-decker" raft of logs. Built in 1890 and burned in 1907. Shown here in the foreground being hitched in behind and pushing the big raft down river. The Lydia Van Sant is made fast across the bow of the raft and by pushing ahead or back, as directed by the pilot on the "J. W." the bowboat moves the bow to the right or left giving the raft a different direction or "point"

Memphis party and used for towing logs in barges to mills on Wolf river. I saw her there in 1915, condemned and later dismantled.

The "Moline" was sold to a Kansas City company for excursion work; later went south and was capsized by striking a heavy wire cable with one end fast on shore and the other end to a government fleet out in the river.

The "F. C. A. Denkmann" was sold and her name changed to "Wabash." She towed corn in barges from the Wabash river to Henderson, Kentucky; was given a new hull and sold to Mill Company at Helena, Arkansas. I saw her there last March looking well as ever. She was an excellent towboat.

The "E. Rutledge" after various ownerships and occupations was rebuilt into the "Orinoco" by Doctor Charles Mayo of Rochester, Minnesota., under the supervision of Captain J. J. Richtmann, who commanded and piloted her until she was sold to an Ohio river party. She is now owned by the Richland Coal Company and advertised "For Sale" by A. O. Kirschner of Cincinnati as the steamer "Ben Franklin."

The "F. Weyerhaeuser," built at Rock Island in 1893, is still alive and looking well. After serving as "light house tender" on the Upper Mississippi and Illinois rivers since rafting days, she has been superceded by the new steel tender "Wakerobin" and was sold last November (1927) to Captain John F. Klein of Cairo, Illinois, to repair and sell again.

The "J. K. Graves," last of the Weyerhaeuser and Denkmann fleet, had a good steel hull but was narrow and top-heavy. She was sold to Cairo party, and capsized in the deep water there and was a total loss.

The "J. S. Keator" was laid up in Cat Tail Slough

after the Keator mill burned and was later sold to Captain L. E. Patton of Memphis, Tenn.

The "Pilot" was sold to a party in Evansville, Ind.

The "Jo Long" was sold to Captain D. Morgan, taken south, capsized and lost in Lake Providence.

The "Irene D." was sold to Thomas Adams of Quincy, who made her over into the excursion steamer "Flying Eagle." She was wrecked and lost by striking a pier of the Hannibal bridge in high water. Though she had a large crowd on herself and barge, there was no loss of life. She hung on the bridge long enough for all to climb onto it and get ashore.

I now come to the LeClaire Navigation Company that Governor Van Sant and I had formed in 1882 and in which we always had equal holdings. It had been a great pleasure to work with such a partner and manager, and to build up our fleet and increase our operations to where we ran all the logs sawed at several mills including Mueller Lumber Company at Davenport, David Joyce at Fulton and Lyons, Lansing Lumber Company, Lansing, Iowa, Clinton Lumber Company of Clinton, and for W. J. Young and Company of Clinton, all above what were handled by their own two boats. Then we handled many rafts for logmen who had no mills and wanted their logs stored where they could be got out for market on a low stage of water.

It was not pleasant to plan and execute the disposal of our property but we did this as we had done everything else in perfect agreement.

We sold the "Ten Broeck" back to Captain John McCaffrey and his sons who used her towing ties in the Tennessee river. She caught fire one night while laid up at Cairo and burned.

We sold the "Iowa" to Captain William McKinley

who used her on the Illinois river towing grain barges and other general work.

We sold the "Netta Durant" to the Van Sant and Musser Company who rebuilt her for a bow-boat and named her the "Lydia Van Sant." She was later sold to the Taber Lumber Company of Keokuk.

After the "Volunteer" laid up idle during the summer of 1898, I sold her to our Carnival City Packet Company for $7000.00, put her on our ways at LeClaire that fall and during the winter extended her cabin aft so she had sixteen nice staterooms and gave her a swinging stage and outfitted her for a short line packet and she made a good one. The next spring (1899) when ready to start, she was totally destroyed by the great fire in Kahlkes yard at Rock Island.

The "Saturn" (the first), owned by Captain George Winans, and the "Mascot" and our fine excursion barge "Comfort" were destroyed in this fire which originated on the "Saturn." Her engineer crew had arrived on her the afternoon before. It was cold. After supper, leaving a big fire in the stove, they turned in and later they turned out – too late to do any good.

The "West Rambo," rebuilt into the "Virginia," was one of a number of light-draft, stern-wheel boats bought by an agent of H. M. Flagler and taken to Florida where they did excellent service in building the extension of Flaglers East Coast railway to Key West.

I traded the "J. W. Mills" to Parmalee Brothers of Canton, Missouri, in the spring of 1894 for the "City of Quincy," paying $5000.00 difference.

Parmalee Brothers dismantled the "Mills" that summer and used her engines, shaft and much other stuff in the "Ottumwa Belle" which they built at Canton and later traded to S. and J. C. Atlee for the "J. C. Atlee."

The "Gardie Eastman" was sold to Fetter and Crosby, Contractors, and used by them many years in United States improvement work. Captain Fetter rebuilt her at Kahlkes yard in Rock Island and after his death Mrs. Fetter sold her to the McWilliams Dredging Company of Chicago and she is still (1927) in commission on the Ohio.

The "Reindeer" was sold to the Illinois Fish Commission, a new and very sharp hull put under her, and her name changed to "Illinois." She is now owned by the New Calhoun Packet Company of Saint Louis, Missouri.

"Lady Grace" was sold by C. Lamb and Sons to Captain William Davis and later by him to J. G. White and Company, doing some work at the mouth of the Mississippi.

"Artemus Lamb" was sold to Joy Lumber Company of Saint Louis and later by them to C. & E. I. railroad to handle barges at Joppa on the Ohio river. She was later rebuilt and named "Condor."

The "Chancy Lamb" was sold south to tow ties and was wrecked on a dam below Nashville on the Cumberland.

"D. Boardman" was dismantled and her engines and some other parts used in the "Columbia," built at Lyons, Iowa, by M. J. Godfrey and Son for Mr. C. H. Young of Clinton.

"W. J. Young, Jr.," the "Queen of the Rafting Fleet," in fine condition and thorough repair, came into the Carnival City Packet Company by direct purchase from W. J. Young himself, in February, 1895. This was my last business transaction with Mr. Young from whom we bought the "J. W. Mills" in 1883. I had been running logs for him up to the time I quit rafting and

knew him well and admired him greatly. He was a handsome, strong man, but he overworked and seldom took any relaxation and his first illness took him off when we thought of him as just in his prime.

I had her beautiful cabin extended aft and made some other changes including a little "texas" for her crew and put her in the Davenport and Burlington trade. She became very popular and successful. At the end of her eighth season we sold her to the Kentucky and Indiana Bridge and Terminal Company at Louisville, Kentucky. They repaired and changed her to an excursion boat – named her "Hiawatha" – and lost her by fire two years later.

The "Sam Atlee" was sold to a Mr. Robert Cothell of New Orleans, who changed her name to "Control."

The "Musser" was hauled out on the Wabasha ways, her cabin, machinery and boilers blocked up and the hull removed and a new and larger hull nearly completed when I bought and completed what became the packet "Keokuk" that ran between Burlington, Keokuk and Quincy from 1908 to 1923 inclusive, when new paved roads and a surplus of trucks and busses compelled us to give up what had been a profitable trade for over 60 years.

The "J. W. Van Sant," "Cyclone," and "Isaac Staples," were all burned in the great fire in the Wabasha yard in December, 1907. They were up on the ways, their hulls dry, and they made a very hot fire.

The second "Saturn" was sold and went south, first to the Missouri and then to the Lower Mississippi.

The "Henrietta" was sold to a party in Paducah, Kentucky, and towed ties out of Tennessee river.

The "R. J. Wheeler" went south and was towing staves and lumber out of Black river, Louisiana. She

caught fire while under way and burned on her down trip with a tow.

The "Daisy" was sold to a man from the south and taken to either New Orleans or Mobile.

The "Clyde" has had a long and interesting career. She was the first iron raft-boat built at Dubuque by the Iowa Iron Works for Ingram and Kennedy in 1870. Hugh Douglas became part owner and master in 1872. She was a side-wheeler, about ninety-six feet long and had good power. She was a strong pusher and quite fast running loose, but very hard to steer. She ran lumber from the Chippewa to Hannibal and Saint Louis for many years.

In 1888 Turner and Hollinshead bought the "Clyde" from the Empire Lumber Company and changed her to a stern-wheeler, gave her new engines and cabin. While she was narrow and did capsize once, she was very fast, handled a tow well and made money. When rafting ceased, she was chartered by United States engineers and used on improvement work. She was then sold by F. J. Fugina of Winona to the Arrow Transportation Company of Paducah, Kentucky, and is still (1928) at the age of fifty-eight years, towing pig iron from Sheffield, Alabama to Paducah.

The "Ravenna" was raised after sinking near Maquoketa Slough; was repaired and when rafting ceased at Stillwater, she was sold to Captain H. C. Wilcox and Sons who ran her several years between LaCrosse and Wabasha in packet service with her name changed to "LaCrosse."

"Menominie" was dismantled and her machinery used in the "Juniata," whose larger engines were put in the "Frontenac."

The "J. G. Chapman" and "Luella" laid up at Wabasha out of commission, were destroyed by fire.

The "B. Hershey" was always in service and when very old, was working on the East St. Louis levee job, and sank to rise no more.

The "C. W. Cowles" was rebuilt at Kahlkes yard in Rock Island; given an entirely new and wider hull and fitted up by the Deere family of Moline, named "Kalitan," to tow their house boat "Markatana." The "Kalitan" took the "Markatana" to New Orleans in November, 1927, and returned to Moline in May, 1928.

The "Bro. Jonathan" was dismantled and her engines used in the "Vernie Mac." When rafting ceased the "Vernie Mac" was sold to tow Ohio river show boats. She is now doing jobs towing around Saint Louis, carrying the name "Jefferson." She now has the engines of the old "Silver Wave."

The "City of Winona" was bought by the Acme Packet Company and ran in the Davenport and Clinton daily packet trade until the Davenport and Clinton electric road put her out of business. She was then taken to Paducah and came back in the spring of 1905 as the excursion steamer "W. W." in the same management as the first "J. S.", owned by Captain John Streckfus.

About 1915, she was sold; went south and later came back to the Ohio and sank while on the way downstream with a tow of barges.

"Juniata," whose name was changed to "Red Wing," ran as a packet between Wabasha and Saint Paul, Captain M. H. Newcomb of Pepin, Wisconsin, owner and master. He sold her and her excursion barge to a party on the Upper Ohio about the close of our season, 1923.

The "Bella Mac" had delivered a raft at Saint Louis. She lay there over night and left for home, LaCrosse, Wisconsin, the next morning at four o'clock. She was leaking and soon began to roll and sank opposite Salt Point Light at the upper end of Saint Louis, a total loss.

The "Mountain Belle" was bought by E. C. Anthony of Hastings, Minnesota, renamed the "Purchase," and towing a passenger barge, ran to Saint Louis during the World's Fair in that city. Then William McCraney of Winona bought her and had her and a barge in the excursion business at Saint Paul until about 1915, when she was hauled out on the Wabasha ways and dismantled.

The "Louisville" and "Helen Mar" were laid up at North LaCrosse and finally dismantled.

The "B. E. Linehan" and "Inverness" were sold to Paducah, Kentucky, parties and towed ties out of the Tennessee and Cumberland rivers.

The "Jessie B." and "Quickstep" were sold south and used rafting and towing logs in barges on the Lower river and its tributaries.

The "Lizzie Gardner" burned while laid up and out of commission in the Davenport winter harbor.

The "Pauline" was converted into a short trade packet and operated out of Burlington to Nauvoo and Keithsburg by Captain Thomas Peel in 1891 and 1892. S. K. Tracey and his brother, George S., prominent lawyers in Burlington, were largely interested in this enterprise. Finding the "Pauline" too small, they bought the "Matt F. Allen," a much larger boat, and sold the "Pauline" to parties in Hastings who later dismantled her and used her nice machinery on a new boat.

The "Thistle" operated one or part of two seasons in

Watching the Morning Star Going to Saint Paul, 1912

The Old Way – Steering by Hand

packet trade between LaCrosse and Saint Paul when rafting played out, but she was expensive on fuel and was too heavy draft for that part of the river. She was sold south and rendered good service towing logs and lumber in barges in the Cairo and Memphis district under another name.

The "Abner Gile," built in LeClaire in 1872, was used dropping logs from Saint Paul to Prescott after rafting ceased at other points; she was almost forty years old when she gave out like the "one hoss shay" and her remaining good parts used in some other boat.

In the late sixties and early seventies when the use of a steamboat in shoving and handling rafts had been successfully demonstrated, every pilot wanted one and nearly every little boat on the Upper Mississippi and its tributaries was tried out and many of them continued in this new occupation as long as they lasted.

Many of them were small side-wheelers about seventy-five feet long with one boiler and one small, slide-valve engine geared to the stiff shaft running across decks to which both wheels were attached. They could back or work ahead both wheels together and had good steering power when working ahead but no rudder power while backing; consequently they were very deficient in "flanking" compared with a stern-wheeler. They were slow and noisy going back up-river.

Jo Perrot, "Big Jo," tried the "Moonstone" but abandoned her because it took her eighteen days to return from Saint Louis to Stillwater when they had taken the raft down in fifteen days.

She and several others like the "Alice Wild," "Alvira," "Union," "Active," "Wm. Hyde Clarke," "Lone Star," "Johnny Schmoker," "Monitor," and "Iowa City" were of this class, just a little better than a stern

crew with oars. They soon wore out or were abandoned for larger and better boats, preferably stern-wheelers.

A few side-wheelers, somewhat larger, gave better satisfaction. The "L. W. Barden," called by the crew "L. W. Workhouse," under Captain Joseph Buisson's command, did a lot of good work running Daniel Shaw lumber from Reads.

The "Viola" and "Julia Hadley," the "Buckeye," the "Annie Girdon," "Champion," the "L. W. Crane," the "Iowa," the "Minnie Will," and the "Pearl," also in this class, wore themselves out in the work but none of them were rebuilt, for by that time the many advantages of the stern-wheeler had been conclusively demonstrated. The "Clyde" was the last of the only three side-wheelers built for rafters; the other two were the "Minnie Will" and "Julia Hadley."

Stern-wheel packets converted or diverted to the work were the "Natrona," "Wm. White," "Mountain Belle"; the "Hartford," "Evansville" and "Jas. Fisk, Jr." from the Ohio; the "Mollie Mohler" and "Hudson" from the Minnesota river; the "St. Croix" from the river of that same name and the "Maggie Reaney" and "Jennie Hays" from Lake Saint Croix. These boats were much better than the best of the side-wheelers but they were not the equals of boats built especially for rafting.

The "Eclipse" and "Vivian," after finishing their rafting careers, were sold to Ohio river parties to tow show boats.

When I decided to quit rafting and engage in short trade packet business, I retained my stock in the LeClaire Navigation Company, but I bought the "Silver Crescent" from the Van Sant and Musser Company, our LeClaire Navigation Company and Captain Bob

Mitchell for $7000.00. She lay all winter at Clinton, Iowa. I got Mr. Black, who had built her cabin when new, to extend it aft and make some other changes. We cleaned, painted her up and moved her down to LeClaire on March 9, 1892. A storm set in from the west that raised such swells, we had to tie up at Camanche. The storm developed into the worst blizzard of the winter and the temperature fell to six degrees by ten o'clock that evening.

New ice in large fields was running the next morning but the west wind held it off the Iowa shore. The sun came out about eleven A.M. We got ready and keeping close to the Iowa side and clear of the ice, were approaching LeClaire, when at Mrs. Young's the ice crowded us close inshore and she slid lengthwise over the rock that sank the "Mollie Mohler" twenty years before. But the "Crescent" was tough and strong and light enough that we scraped over without injury.

When one-fourth of a mile from our yard, the large blow-off valve to the mud-drum bursted, having frozen up under way. She had just enough headway to reach the shore where a man caught our head line and took turns around a post, and kept us from going on over the rapids in our helpless condition.

The next morning she caught fire while the watchman was at breakfast, but a passer-by saw the blaze in time to put it out.

The second morning a large, heavy field of ice swung and caught her, parted one head line and pulled out the post the other one was fast to, but it held long enough to crowd her on shore and the other lines held her.

When I got to her I heard water running in her hull. Quickly investigating, I found the ice had broken in

one plank at the water line. An old comfort and an inch board took care of this till we could list her over and fix it right.

By this time I felt sure I had bought a lucky boat and I never had any reason to change my mind on this point.

I finished up a small rafting contract that spring with the "Silver Crescent" and then put her into the Carnival City Packet Company which I had organized that spring, and on June 17, 1892, we began service between Davenport and Burlington, Iowa, and took in $16.70 on our first round trip of two days.

A month later we had the highest water ever known at Davenport. For a while the only place we could put our stage on ground was just below the north end of the Government bridge.

The "Silver Crescent" was ten years old when the Carnival City Packet Company bought her. We had seventeen years hard service out of her, many of them quite profitable, all of them successful, and got through without a serious mishap and her cabin, engines and many other parts were good as new when we used them in building the "Blackhawk" in 1908.

The "Frontenac" was the last large rafter built. Samuel Peters of Wabasha built the hull which was one hundred and forty feet long, thirty feet wide and three and one-half feet deep, in 1895. The hull was taken to Winona where the engines and boilers of the "Juniata" were transferred to her. The cabin was also built at Winona and the new boat came out in 1896 owned by Laird, Norton and Company of Winona and in charge of Henry Slocumb.

When through rafting she towed the big excursion barge "Mississippi" until she hit the lower Winona bridge and sank close to shore just below it. When

raised she was sold to Captain D. W. Wisherd and burned while laid up in Quincy bay.

The "Silver Wave," "LeClaire Belle," "Jas. Fisk, Jr.," "Wild Boy," and "Evansville," when their hulls were worn out by long and successful service, were dismantled at LeClaire; and some of their engines used in new boats.

The "Tiber" was also dismantled at LeClaire and her new boilers used in the "Irene D."

The "Stillwater" was dismantled at Rock Island and her machinery used in the "E. Rutledge."

The "C. J. Caffrey" and "Prescott" were also dismantled at Rock Island.

The "Jas. Means," after a few seasons of profit in rafting, in her old age was dismantled and her engines used in the "Golden Gate."

The "Dan Hine" was dismantled at LaCrosse.

The "G. H. Wilson" was dismantled at Dakota Bay.

The "B. F. Weaver" was dismantled at LaCrosse.

The "Silas Wright" was sunk on the upper Rapids, her engines recovered and used in the "R. D. Kendall."

The "Penn Wright" burned at Stillwater.

The first "Chancy Lamb," after long and useful service, was dismantled at Clinton.

The new "Chancy Lamb," which appears in the list of 1893, was a larger and more powerful boat, having engines twelve inches in diameter by eight-foot stroke, like the "Irene D." They were the only two boats used in rafting that had eight-foot stroke engines. There were only two that had seven-foot stroke engines; the "Charlotte Boeckeler" and the "F. Weyerhaeuser."

The "Ida Fulton" was dismantled at Dubuque and her engines went in the new "Glenmont."

The First Use of a Steamboat to push and handle a Raft

There has been much discussion over this matter. I have heard all the witnesses and it is plain in the evidence that they agree on these facts, viz.:

FIRST. That several steamboats, some of them quite large, like the "Kentucky II," the "Minnesota," and others, had shoved rafts through the Saint Croix and Pepin lakes for years, even prior to 1860.

But these boats were made fast to the raft usually by spreading the strings at the stern to let the boat one-half or two-thirds her length down into the raft so she could be held there.

She could push a large raft or sometimes several rafts through either lake in ten or twelve hours. She could back, kill its headway and land the raft where there was current. But the oars manned by a strong crew, especially on the bow, were depended on to direct the course; and the boat was always let go at the foot of Lake Pepin.

SECOND. That the first effort or trial to use a steamboat to tow and direct a raft below Lake Pepin was made by Captain George Winans when in September, 1863, he chartered the little side-wheel Chippewa river packet "Union" for seven dollars a day; hitched her into a lumber raft at Reads Landing and started for Hannibal, Missouri. Fortunately he had secured a full crew of raftmen to man all the oars for he soon needed them.

The little "Union" demonstrated her ability to give the raft some headway through the water and increase its speed perceptibly, but the "crabs," with which they had arranged to pull her stern around and change her position behind the raft were inadequate; and failing to control the boat she got in trouble before they were five miles from Reads. The "Union" was sent back from Winona and Captain Winans took the raft to Hannibal in the old man-power way.

THIRD. The first trial was called a failure, but there was enough encouragement in it for Captain Cyrus Bradley with W. J. Young's encouragement, to charter the same steamer "Union" the next year to run a raft of logs from Reads to Clinton, Iowa, for W. J. Young and Company. This trial was a success and by all the disputants admitted to have been the first.

FOURTH. Captain Winans got charge of the "Union" soon after she made this trip to Clinton and used her continuously for at least three seasons.

FIFTH. Captain Bradley on his next trip to Clinton used a little boat called the "Active" and he soon started building a small side-wheeler which he called the "Minnie Will."

Fountain City, Wisconsin
The bluff is 450 feet high

Steamer Belle of Calhoun and Grand Tower Rock

The First Boat built to tow Rafts

There has been much discussion on this point also. The "Union" and several other boats used in the early days in towing rafts had been built for other purposes.

The first boat built to tow rafts was the "LeClaire," built by Jonathan Zebley at LeClaire, Iowa, for Thomas Doughty in 1866.

During the Civil War Mr. Doughty was a chief engineer on several of the gunboats of the United States navy that did excellent service on the lower Mississippi and its tributaries.

Chief Doughty had a good education, was a fine mechanic and was progressive in his ideas.

He saw the advantage of a stern-wheel for towing and handling rafts; but he did not build her large enough and while the pilot he took in as a partner had been a successful floater, he did not quickly become familiar with the use of the boat and the first trip was so discouraging, that Mr. Doughty sold the "LeClaire" to contractors who were working a large improvement job on the Rock Island rapids. The "LeClaire" rendered excellent service in this work for many years.

The commissioner of navigation, Washington, D. C., says, the records show that she was eighty feet four inches long, fifteen feet wide and three and one-tenth feet deep and measured twenty-five and sixty-nine one-hundredth tons, and was first inspected June 16, 1866.

She had one horizontal boiler eighteen feet long, forty inches in diameter, with two fourteen-inch flues

and was allowed one hundred and twenty-five pounds steam pressure.

The "LeClaire," like many a large boat, was not completely equipped when she started out. She had a big whistle but no engine bells to signal the engineer. So Mr. Doughty and George Tromley the pilot arranged to use the big whistle which could be heard everywhere:

One blast meant "ahead";
Two blasts meant "back";
and when in reverse or forward motion,
One blast meant "stop."

Mr. Tromley said they got along very well on this arrangement for two or three days. The water was high and when he saw a boat coming he would keep clear of her by hugging the other shore without blowing the usual signal.

But on the third night out he met a large packet coming down in Coon Slough, a narrow and crooked part of the river; when to avoid a collision, Mr. Tromley blew one whistle, and Mr. Doughty stopped the engines. The pilot on the descending boat preferred the other side and blew two whistles and Pilot Tromley responded. Then Doughty set the "LeClaire" to backing and Pilot Tromley blew one whistle to stop him. The big boat was close down on the little one then. Her pilot rang to stop her engines, and called out, "What in h--l are you trying to do with that little boat anyway?" "My friend, I want to get by you and go on up the river if I can." "Well, go ahead, take either side and go on, I thought you were trying to go both sides of us."

When they got to LaCrosse, Tromley landed her; went back to Mr. Doughty and in his Canadian manner and voice said to him, "I say my friend, don't you tink

STEAMER LOUISVILLE

Owned by Durant and Wheeler of Stillwater, Minn., during the seventies. Captain R. J. Wheeler was her master. She was subsequently owned by Knapp, Stout and Company of Dubuque, Iowa, and Saint Louis, Mo., with J. H. Wooders and later Andrew Locken as masters. She, with other boats of this company, were bought by McDonald Brothers of LaCrosse, Wis., about 1883 and Captain L. A. Day became master and later R. M. Cassidy. She was worn out in the service of McDonald Brothers

we better go get some o' dem little bell for dis engine room?" They got them.

Two men who were in the crew of the "LeClaire" on this experimental trip away back in 1866 are alive yet to tell the story: Captain J. D. Barnes of LeClaire, and David G. Carr, our long-time barber in LeClaire, now living in Davenport.

Now we come to the first real raft-boat built for and successfully used in the work. It will be more interesting to have the story as told by the man who built and owned her. He was not a raftman then. He was a young man in partnership with his father – J. W. Van Sant in the LeClaire yard, building and repairing river craft. His ideas originated from intelligent Floating Pilots who favored the use of a steamboat in getting rafts down river.

Some of these men had had a little experience in using steamboats and young Van Sant caught their ideas and became enthusiastic.

I quote from his letter of December 3, 1920:

STEAMER "J. W. VAN SANT"

The first "J. W. Van Sant" was built at LeClaire, by J. W. Van Sant and Son. The hull was launched in the month of December, 1869. She was ready for business on the opening of navigation in 1870. She was one hundred feet long, twenty feet beam and four feet depth of hull. Engines twelve inches by four foot stroke, built by the famous Niles Works of Cincinnati. Her boiler was twenty-four feet long, forty-four inches in diameter, with ten and six-tenths inches, lap-welded flues. Then, lap-welded flues were only twenty feet long and it was said that we could not have boilers more than twenty feet in length. Fortunately, we had an old-time steamboat engineer, Henry Whitmore, a man of long experience and a first-class mechanic, who contended that the flues could be lengthened by brazing, and this was successfully accomplished.

The "J. W. Van Sant" was the first stern wheel boat of large

power built especially for the rafting business. The rafters at that time were small side wheel steamers constructed with geared machinery and generally called "coffee mill" boats.

It is safe to say that the "Van Sant" of 1870 was the pioneer rafter for after she had proved a success, Lamb and Son, W. J. Young and Company, Weyerhaeuser and Denkmann, B. Hershey, and nearly every lumberman doing business on the Mississippi river constructed boats to tow their logs and lumber.

In many cases stern-wheel boats were brought from the Ohio river and used in the rafting business. After the "Van Sant" demonstrated successfully her value as a rafter the side-wheel boats soon disappeared.

If the "Van Sant" was a success, a large part of it was due to Henry Whitmore, before mentioned, who urged powerful engines and plenty of boiler capacity.

This boat (barring a few mishaps, which were no fault of the boat but of the inexperience of those who first piloted her) was a decided success, made money for her owners and really by her money-making qualities laid the foundation for the Van Sant and LeClaire Navigation companies, two companies that owned and operated more than thirty steamboats during the forty years of rafting, or until the pine forests in Minnesota and Wisconsin were denuded of their timber.

Her builders were by no means wealthy, so the machinery was purchased on time, wages and material could not be paid for while the work was progressing. "Nothing risked, nothing won," is an old proverb. The boat was a success; she not only paid all her bills but gave her owners a handsome profit. The first raft run by this boat was for Weyerhaeuser and Denkmann. Mr. Weyerhaeuser was a passenger. After passing through the Rock Island bridge safely, he was more or less anxious about the landing of the raft at his mill-boom. He suggested the employment of the ferry boat to assist, but the "Van Sant" had no trouble whatever in making the landing safely. Mr. Weyerhaeuser saw that the boat was a success and was one of the very first mill-men to build a steamboat for towing his own logs. The "Van Sant" was not only all that has been mentioned but she was unlike any other boat. The Rock Island bridge (the old one) was very dangerous to both boats and tows so that this steamer was constructed so she could lower her chimneys and pilot house and follow her tow under the bridge practically insuring safety.

She only had one deck above main deck and consequently was more

easily managed as she could pass under the bridges and could run in any wind that the raft could weather.

Twenty years after this boat was built, it is safe to state that there were fully one hundred stern-wheel boats engaged in the rafting business.

The "Van Sant" was under charter to Capt. Winans during the entire seasons of 1870 and 1871 and early in 1872 we sold her to the Eau Claire Lumber Company who kept her busy for several years and then used her engines on the new "Peter Kirns" built to replace her.

The above description was received direct from Ex-governor S. R. Van Sant on December 3, 1920. His letter of even date is in my file.

The Largest Rafts

The largest raft brought down the river during the fifty years from 1865, when they first began using steamboats to tow the rafts until the steamer "Ottumwa Belle" ran the last raft in 1915, was taken from Stillwater on Lake Saint Croix to Saint Louis by Captain George Winans with the steamer "Saturn."

This raft was sixteen strings wide and forty-four cribs long, rafted twenty-six courses deep.

It was two hundred and seventy feet wide by fourteen hundred and fifty feet long and with the top load contained nine million feet of lumber.

The "Saturn II" was a good, strong boat with engines sixteen inches by five-foot and Captain Winans had a good bow-boat on the head. This trip was made in 1901.

The largest log raft was brought from Lynxville to Rock Island in 1896 by Captain O. E. McGinley with the steamer "F. C. A. Denkmann," using the "H. C. Brockman" as her bowboat. The raft was two hundred and seventy feet wide and fifteen hundred and fifty feet long, containing about two and one-quarter million feet.

Some double-decked or double-tiered log rafts were brought from Stillwater in the nineties. When they were careful to place only small logs on top, crosswise, they did fairly well in good river, but when they were careless and hauled large logs up on top and loaded unevenly, these rafts soon encountered trouble when they struck shallow water. Double-deckers were never popular with the pilots who had to run them or the crews that had to work on and over them.

The Last Raft – the end of the game

The first rafts run from 1838 to 1843 were lumber from the Wisconsin river and from Saint Croix falls.

The last raft brought down the Mississippi was also of lumber sawed and rafted at Hudson, Wisconsin, on Lake Saint Croix. It was in eight strings, thirty-six cribs long and rafted twenty-eight courses deep. They made a raft one hundred and twenty-eight feet wide and eleven hundred and fifty feet long, which contained three and one-half million feet of lumber and it carried about a million feet of top load consisting of timbers, lumber and lath.

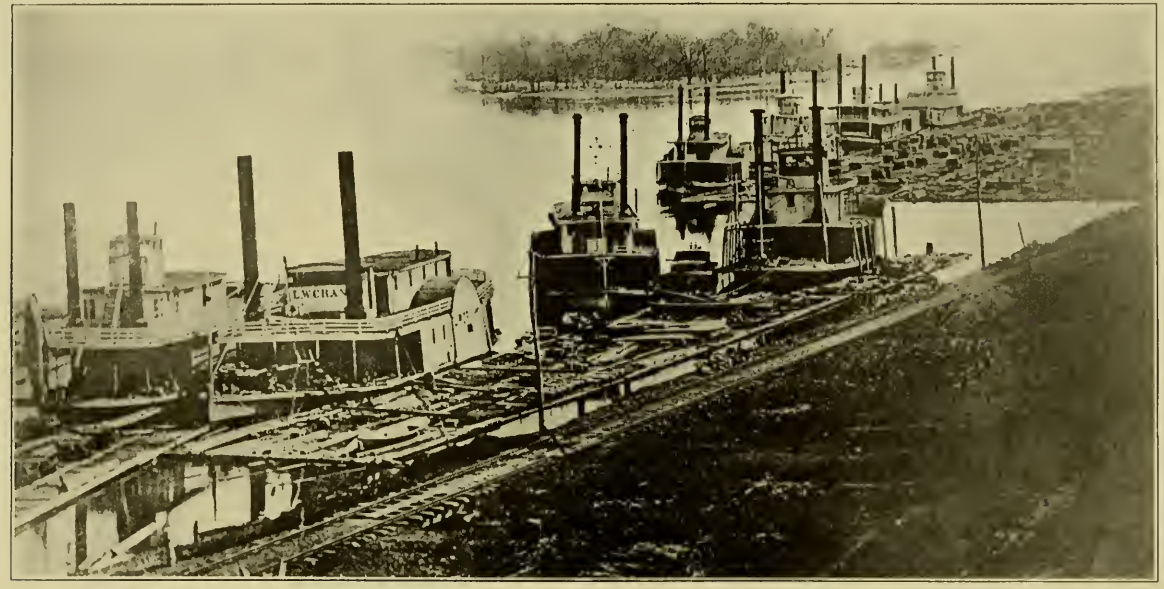
This raft was towed by the steamer "Ottumwa Belle" with the "Pathfinder" as a bow-boat. The little steamer "J. M.," that had been engaged in towing logs from Saint Paul boom to Prescott was hitched in alongside the raft near the bow and taken down river to be sold.

Captain W. L. Hunter of Winona was in charge as master and pilot and made a nice, clean trip from Hudson to S. & J. C. Atlee at Fort Madison in fourteen days with a single crew.

Captain Hunter had been on the "Ottumwa Belle" doing Atlee's running until the logs gave out, but in 1915 was piloting on the "Morning Star" in the Davenport and Saint Paul trade.

Mr. Atlee wanted Captain Hunter to run this last raft and Captain Hunter was pleased to do it; so we arranged that I would stand his watch on the "Morning Star" while he made the trip that wound up the great industry that had lasted seventy-five years and really made all the good towns on the Upper Mississippi.

It started in a small way and demanded skill and hard work to cut the logs and drive them down to the booms where they were held, assorted, rafted and scaled



OLD TIME RAFTERS LYING AT READ'S LANDING, 1871

These boats are waiting a rise on the Chippewa to bring out their lumber. Left to right they are Hiram Price, L. W. Crane, Annie Girdon, L. W. Barden, Buckeye, Clyde, St. Croix, Wm. Hyde Clark, and Silas Wright, all adapted except the Clyde

and then floated under man-power control to the mills.

There were many disappointments and failures in the early days but study and hard work, guided by experience, soon won the game and got the prize.

When Chancy Lamb of Clinton invented the "Nigger" for controlling the position of the towboat behind the raft he did a great thing for the business. He did not patent it. It was built and sold at a very low price. Any one who could was free to add any improvement, but no one ever did so.

It completely filled the bill, just what was needed, and it has never been changed. I never could learn who invented the "three-link iron boom chain" first used in rafting at Beef Slough and later everywhere. It was a great improvement over the old rope booming and much cheaper, because the chains were taken off at the mill where the logs were sawed and sent back to the rafting works. Our boats made no charge for carrying back these chains which were often a burden in low water. A few of these chains were lost in break-ups, but ninety-five per cent of them were used over and over again – there was no wear out to them.

One Freak and a Pair of Twins

With the building of so many raft-boats during the period from 1870 to 1900, and by so many different owners, it is somewhat strange that so few were failures and I recall only one real freak, that came out in 1872.

On her side bulkheads we read: "Eau Claire Lumber Company's Iron Raft Boat J. G. Chapman."

She was neither a side-wheeler, a stern-wheeler nor a propeller. She was about one hundred and ten feet long and twenty-two feet wide and had "dowler wheels," somewhat on the order of a screw propeller, but the wheels were ten feet in diameter with only one-fourth part submerged. The lowest part of the wheels were not below the bottom of the boat which drew three feet at the stern. The wheels when working ahead revolved towards each other and threw a very strong current against the balance rudder.

This "J. G. Chapman" was a good strong shover and had good rudder power going ahead, but was almost useless in backing and she was very slow going up river. She was later changed to a regular stern-wheeler with engines fourteen inches by six foot, but having no hog chains, her iron hull broke in two coming up river, and she sank near Iowa island. Her engines were used in the second "J. G. Chapman," which was a very successful raft-boat.

During one season of good water and plenty logs, S. and J. C. Atlee had more work than their steamer "Le-Claire Belle" could do alone, so Mr. Sam Atlee made a

few changes on the large center-wheel ferry-boat "Keokuk" and with Captain Asa Woodward in charge as master and pilot she made several trips.

When dismantled, her fine engines were put in the new "Sam Atlee," an excellent towboat.

In only one instance were two boats built in duplicate. My old friend Captain Fred A. Bill of Saint Paul tells us about them as he was in the general office of the Diamond Jo Line when Mr. Young of W. J. Young and Company of Clinton, Iowa, and Mr. Fred Weyerhaeuser of Weyerhaeuser and Denkmann of Rock Island, had these two boats built in 1881, using the same specifications for each and when finished they drew cuts to decide the ownership. Mr. Young named his boat "D. Boardman," and Mr. Wyerhaeuser named his for his partner, "F. C. A. Denkmann."

Their hulls were one hundred and thirty feet long and twenty-eight feet wide. Their engines were fourteen inches by six foot. They were splendid boats and gave excellent service many years till the log supply was exhausted.

Some of the Men Prominent in the Rafting Industry, 1840-1915

CAPTAIN S. B. HANKS

Stephen B. Hanks was born near Hodgensville, Kentucky, October 9, 1821. His father's only sister, Nancy, later married Thomas Lincoln and became the mother of Abraham Lincoln.

After the death of his father and when Stephen was twelve years old, the family moved up to White County, Illinois, and the mother marrying again, young Stephen and a sister, Mary, went to live with a brother of Mrs. Hanks, named Alfred Slocumb, who moved to Knox County, Illinois, in 1830 and from there to Albany, Illinois, in 1836.

He made his home with Alfred Slocumb, doing hard work with little pay, and having laudable ambition backed by a large, strong frame, good health and willingness to work, he left Albany in 1841 for the far northern pineries, where he worked four years cutting and getting out logs and driving them to the sawmill at Saint Croix falls, and helping raft and run the lumber to Saint Louis with Sandy McPhail as pilot. In this way he became a pilot himself. Late in 1843 he helped run two rafts of lumber that only got to Albany when winter set in. Part was sold there and the rest stored in Cat Tail Slough.

In January he went back to Saint Croix falls, mostly by following the ice covered Mississippi and Saint Croix rivers with a sled and pair of mules.

In June of this year, 1844, he made his first trip as pilot of a log raft that floated all the way down from Stillwater, at the head of Lake Saint Croix to Saint Louis, a good, long seven hundred miles.

In 1845 he helped cut the logs and get them to the first mill in Stillwater owned by John McKusick. He helped raft the lumber from these logs and ran the raft to Saint Louis where it was sold.

He was one of the first to run logs and lumber by contract: so much a string or per thousand feet, finding the crew and paying all expenses.

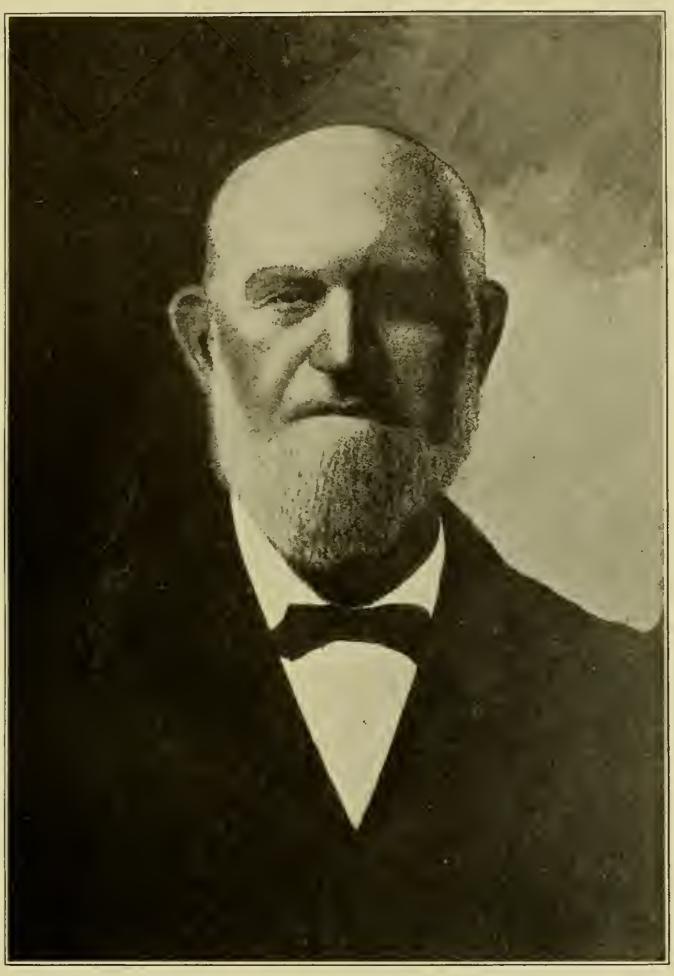
He continued this work running mostly by contract for ten years when he quit rafting for a time and began piloting steamboats in the Galena and Minnesota Packet Company between Galena and Saint Paul, first on the "Dr. Franklin II," with Captain D. S. Harris.

On his first arrival in Saint Paul the only house there was a double log cabin used as a trading post by Louis Robert. He was a delegate from Stillwater that aided in locating the old Capitol building. The same committee also located the old penitentiary in Stillwater.

Captain Hanks served as pilot on nearly every boat in the Galena and Minnesota Packet Company's line. He was on the "Galena" when she had a hard race from Lake Pepin to Saint Paul and not only won the race but free wharfage in Saint Paul for that year.

He was on the "Galena" when she burned at Red Wing landing July 1, 1858. He was pilot on the "Alhambra" and reached Albany a few hours after the tornado had wrecked Camanche, Iowa, and Albany, Illinois, June 4, 1860. Many were killed in the two towns but Captain Hanks found his family and relatives uninjured.

In the summer of 1868 Captain Hanks got off the



Captain S. B. Hanks

Lived to be 98

fine fast mail packet "Key City" and left the company he had been with fourteen years. There had been many changes in the ownership and management of the boats of the old Galena and Minnesota Packet Company and when Mr. Joseph Reynolds or "Diamond Jo" as he was best known, offered Hanks ten dollars per day and steady work throughout the season, he accepted the proposition and went on the "Ida Fulton," a stern-wheel boat that was a good carrier herself and always towed barges during the wheat season. He was master and pilot of the "Ida Fulton" most of the time he worked for "Diamond Jo," and it was hard work, as the river was generally low in the fall when the grain movement was greatest, which meant that the boat herself and her barges were always loaded to all the water in the river and they were pushed for time.

After five and one-half years of this service with the Diamond Jo Line, Captain Hanks went with his brother-in-law, Captain A. T. Jenks, as pilot on the raft-boat "Bro. Jonathan." He was on her three seasons, from 1874 to 1876, running rafts to different mills and got to be right "at home" in handling rafts with tow-boat as he had formerly done by men with oars on the bow and stern. He liked this work and never went back to the packet boats.

Early in 1877 Captain Jenks associated himself with E. W. Durant and R. J. Wheeler and put the "Bro. Jonathan" into the new concern styled "Durant Wheeler and Company," which had a long and successful career.

Captain Hanks did not follow the "Bro. Jonathan" into the new company. He engaged early in 1877 with C. Lamb and Sons of Clinton, Iowa, at $1600.00 per season and went as captain and pilot of the "Hartford."

He continued in their service fifteen years during which time he worked on all their fine boats, but mostly on the "Artemus Lamb."

Not only did the captain hold his job but he held the confidence and respect of his employers and the crews of the different boats in the Lamb fleet, and he was held in high esteem by all who knew him.

He was a large, well built, strong man, full of energy and enterprise, but mild and gentle in his disposition.

Turned out as he was at the age of twelve to make his own way in a rough new country and as he grew older working in the woods in winter and on the river in summer, he acquired no bad habits. In a day when drinking and gambling were common; much of the time working and dealing with men who used liquor, tobacco and cards, he never cared for either. He did not play the saint or preacher, but he didn't care for those things, that was the end of it. Captain Hanks was generous and kind to all, especially his family and relatives. He retained his mental faculties and pleasant manner until his death in 1917.

CAPTAIN J. M. TURNER

Captain J. M. Turner, still living (1928) and in good health mentally and physically, began his river life as a cabin-boy on the Galena and Minnesota Packet Company's side-wheel steamer "City Bell" with Captain Lodwick in 1853 when he was sixteen years old. She was running regularly between Galena and Saint Paul. He remained on her in 1854 and 1855, and by that time knew the river on that run.

In 1856 he was cub pilot on the "Bill Henderson," then a mail-boat running between Galena and Rock Island on alternate days with the steamer "Jas. Means,"

Captain J. M. Turner of Lansing, Iowa

until July, when he went back on the "City Bell" and made eight trips on her when she struck a snag and sank, a total loss, in Coon Slough.

Soon after he fell in with a Mr. LaFrance who brought lumber down the Chippewa, knew how to handle a floating raft but needed some one to show him the channel down the Mississippi. He hired young Turner, then twenty years old, agreeing to pay him three dollars per day to show him the way. They made five trips in 1857 and he paid Turner three hundred and seventy-five dollars in November. Jerry sensibly went back to his home town, Dubuque, and attended school four months.

There was a very late opening in the spring of 1858.

Jerry was at Reads Landing expecting to work again for Mr. LaFrance but he did not appear.

Thirty-two steamboats were lying at Reads awaiting the break up of the ice in Lake Pepin. There were twenty-five saloons running in the village and they had lively business while they had the crews of all these boats and their passengers for patrons.

As LaFrance failed to show up, young Turner made one or more trips, pulling an oar to get an idea of the river from Keokuk to Saint Louis. Then he piloted floating lumber rafts for O. H. Ingram of Eau Claire, mostly to Saint Louis.

Paid off there at the end of the season he changed his paper money for gold, getting $1250.00 in coin.

He now took an observation trip south on a fine packet; stopped long enough at Memphis to attend a slave auction which made him a strong abolitionist and turned him back home.

His first experience in using a steamboat was for a man named L. H. Rumsey of LaCrosse who had a

small, single-engine geared, side-wheel boat called the "Johnny Schmoker." Well pleased with the experiment he later bought a little larger boat called the "W. H. Clark" and used her to run lumber for Porter and Moon, later known as the Northwestern Lumber Company.

In 1869 this company bought the "Silas Wright." Captain Turner then sold the "W. H. Clark" and went on the "Silas Wright" as master and pilot for eight seasons on salary. This was from 1869 to 1876 inclusive.

In 1877 and 1878 he ran Dells Lumber Company's rafts to Hannibal on contract.

In 1881 and 1882 he was on the "Golden Gate" running Chippewa Lumber and Boom Company's lumber mostly to Hannibal and Saint Louis.

Then he and Captain A. F. Hollinshead ran logs and lumber for the Empire Company and Standard Lumber Company and others with the "Clyde" and "Pauline" from 1883 to 1893 – when they dissolved partnership. They sold the "Clyde." Captain Turner took the "Pauline" and ran the Empire lumber for four seasons, from 1890 to 1893. He then sold the "Pauline" and quit considerably ahead of a hard game. After resting up he started a button factory in Lansing that is still running after a successful career, with Captain Turner's grandson now in charge.

Captain Turner was a close manager and a careful, skillful, cautious pilot. He made good average time and delivered his rafts in excellent condition when and where they were wanted. I never passed him broken up or aground or in any other trouble.

He went on the river alone – had no relatives on the boats to help him. The pilots were members of the Association and would give him no help or encourage-

ment to get his pilot's license; but he got it without their help, proved his merit by his work and quit the river with a competency, which he did not lose when he went ashore but increased it by successful enterprise since.

CAPTAIN GEORGE WINANS

The subject of this sketch began rafting in 1856, the year I was born, and the next year, when only eighteen years old, he piloted a lumber raft from Reads Landing to Knapp Stout and Company at Dubuque. He ran his last raft of logs from Saint Paul to Prescott in 1916, his entire service covering a stretch of sixty years. During this time he had owned the steamers "Admiral," "C. W. Cowles," "Dan Thayer," "Frank," "Julia," "Mars," "Neptune," "John H. Douglas," "May Libby," "St. Croix," "Pathfinder," "Sam Atlee," "Satelite I," "Satelite II," "Saturn," "Saturn II," "Silas Wright," and "Zalus Davis," and served as master and pilot on many others including the "Union," "Alvira," "Buckeye," "Chippewa Falls," "J. W. Van Sant I," "Pearl," "G. H. Wilson," "Lone Star," "Mountain Belle," "City of Winona," "A. J. Whitney," "Jas. Means," and "Wyman X."

Captain Winans was the first pilot to try to run a raft with a steamboat. In September, 1863, he chartered a little side-wheel geared boat of only twenty-nine tons; hitched her into the stern of a lumber raft at Reads Landing and started for Hannibal.

He prudently had secured a good bow crew to work the forward end and he also had men to form a full stern crew if the steamboat failed to handle her end.

Owing to the lack of a rig or machine to change or control the position of the boat behind the raft they soon got in trouble and before going ten miles, he let

the boat go back to Reads; his crew shipped up the stern oars and they proceeded in the usual way to their destination, Hannibal, Missouri.

But Captain Winan's idea was correct; it only needed working out. The next year Cyrus Bradley took the same boat, the "Union," and successfully used her behind a raft of logs to Clinton, Iowa, for W. J. Young and Company. W. J. Young authorized Bradley to charter the "Union" and was well pleased with the result and soon bought larger, better boats to use on his own work.

Captain Bradley soon after built the "Minnie Will," a side-wheel geared boat – used her and later built the powerful stern-wheeler "Mark Bradley."

In the meantime Captain Winans secured the "Union" and used her successfully in 1867 and 1868; the little side-wheel "Lone Star" and the larger "Buckeye" in 1869. In 1870, when the first real raft-boat built for the business came out, he chartered her for twenty-five dollars per day and made a lot of money with her in 1870 and 1871. This boat was the first "J. W. Van Sant," built by J. W. Van Sant and Son at their yard in LeClaire, Iowa.

Captain Winans quit the river before I began, probably about 1874, with considerable money for that day. He built a $40,000.00 hotel in Chippewa Falls and lost it by fire, with no insurance.

He then went to California and spent some time on its rivers. He came back to the Mississippi about 1880 and got into the game bigger than ever and stayed in to the last; he did a lot of work and cut prices on lumber contracts; ran some very large rafts and took too many chances; this resulted in many bad and expensive losses.

With his skill as a pilot and his energy and honorable

methods in business he deserved more profit than he got out of it. We cannot help feeling that more caution mixed in with his operations would have secured better results.

Captain Winans made his home for many years at the Merchants hotel in Saint Paul until his death, January 22, 1926.

CAPTAIN E. J. LANCASTER

John Lancaster, as he was known on the river, was born and raised in LeClaire, Iowa.

His father, Thomas Lancaster, was a very competent millwright and ship carpenter.

John enlisted when only eighteen years old, saw very active service in the Civil War, was captured and confined a long time in Andersonville prison. He only weighed ninety-five pounds when he was released, but picked up rapidly after he came home, and soon went on the river and learned it while pulling an oar on a floating raft.

Towing by steamboats was then coming in vogue and Johnny Lancaster was quick in catching on to the new way and was successful from the start. He always had employment on good boats like the "J. G. Chapman I," "Mountain Belle," "Stillwater" and "Eclipse." He was not only a skillful, safe, pilot, but a careful, intelligent master who took care of his boat and had excellent control of his crew.

His last rafting was on the steamer "Eclipse" that was owned by Lindsay and Phelps and the Cable Lumber Company of Davenport. He ran all the logs for these two sawmill companies from 1885 until they shut down in 1904.

This expression from Mr. Fred Wyman of the Lind-

say and Phelps Company certainly is a strong testimonial of their appreciation of Captain Lancaster's work:

OFFICE OF LINDSAY AND PHELPS COMPANY

[Fred Wyman, George F. Lindsay, C. M. Cochrane, Edwin B. Lindsay]

501 Citizens Bank Building, Davenport, Iowa, March 13, 1928.

Captain E. J. Lancaster, was master and pilot of the steamer "Eclipse," owned by Lindsay and Phelps Company and the Cable Lumber Company.

This association continued until the Cable mill was destroyed by fire, when the Lindsay and Phelps Company purchased the interest of the Cable Lumber Company.

During all of these years Captain Lancaster had the confidence of his employers to such an extent, that he was given entire charge of the steamboats, the "Eclipse" and the bow-boat "Everett," also care and laying up of surplus logs in storage harbor.

He was a man so conscientious, and of such sterling integrity that the confidence reposed in him was not misplaced. He was a skillful pilot with unusual ability in managing his work.

It was a sad day when the "Eclipse" was sold, and the relations were severed after so many years of such close friendship.

FRED WYMAN

When the rafting business played out, Captain Lancaster made changes and improvements in the steamer "Eclipse" and operated her three or four seasons in packet service; first between Clinton and Davenport and lated between Prairie Du Chien and Dubuque. The packet business not proving satisfactory, he sold the "Eclipse" to an Ohio river party and took charge of the fine little towboat "Marquette," towing gravel from Meridosia to Moline.

Captain Lancaster died on May 9, 1914. His son, Harry, succeeded him and has been master and pilot of the "Marquette" ever since.

Captain E. J. Lancaster of LeClaire, Iowa

Long on Stillwater and Eclipse

Captain E. W. Durant of Stillwater, Minn.
President of Durant, Wheeler and Company

COLONEL E. W. DURANT

Edward Durant was prominently connected with the rafting business almost from the beginning.

He was born at Roxbury, Massachusetts, April 8, 1829. The family moved first to Cincinnati and then to Sterling, Illinois, and in 1843 to Albany, Illinois.

When about eighteen, Captain Stephen Hanks took young Durant with him as cook and clerk on floating rafts. He soon dropped the cooking part and gave serious attention to learning the river, made rapid progress and very soon began piloting rafts himself.

About 1867 he formed a partnership with another young pilot called Jack Hanford and they took contracts to run logs and lumber with Stillwater, Minnesota, as their home port. Always progressive, they early began using boats to shove and handle their rafts. In 1869, they had the side-wheelers "Julia Hadley" and "Viola." Durant also took up the selling of logs and lumber and no one could beat him at this.

Jack Hanford was killed by getting caught in the geared machinery of the "Julia Hadley." Then R. J. Wheeler entered the firm with the fine towboat "Louisville" and they bought the "Robert Semple," another Ohio river towboat. Then in 1877, Captain A. T. Jenks entered with the "Bro. Jonathan" and the style of the firm was changed to Durant Wheeler and Company.

The firm had a successful career and extended its business until in 1880 it had a boat yard where it built several fine raft-boats, including the "R. J. Wheeler," "Netta Durant," "Daisy," "Pauline," and "Dispatch."

It also had a big interest in South Stillwater Lumber Company, the Lumbermans National Bank and owned the fine new Opera House.

Captain Durant had excellent ideas about building

boats and had excellent taste in finishing them so they all looked like June brides.

He gave a lot of time to public affairs, showing a great interest in his home city and his state; was active in politics and got the title of Colonel in recognition of his party service.

He was an influential member of the Masonic and K. of P. lodges and also of the Old Settlers Association of the Saint Croix Valley. They had one boat built on the Ohio river, called first "A. T. Jenks," later the "Ed Durant, Jr." She had the same power but was not as good a boat in any way as those they built in their own yard.

He was a genial, jolly, courteous gentleman of the old school. I knew him best when he was up in the eighties, ripe and mellow with age, full of fun and interested in everything.

He left us December 9, 1918, after a long and pleasant voyage.

CAPTAIN JOSEPH BUISSON

Joseph Buisson was born in Wabasha, Minnesota, February 17, 1846. His father, a French trader from Canada, was one of the founders of the town beautifully located on Wabasha prairie and named after a noted Sioux chief whose people made their home at the mouth of the Zumbrota river.

Joseph took more to school and books than his brothers who were fonder of outdoor sports and hunting, and as he grew up developed a great fondness for reading, especially works on history and biography, and was a well-informed man.

He belonged to several fraternal organizations including Masonry in which he was a close student and

Captain Joseph Buisson of Wabasha, Minn.
President of Valley Navigation Company

his life exemplified its teachings. His family were Episcopalians and while not a member, he was an attendant of church, and for many years he was the faithful Peoples Warden of Grace Memorial Church in Wabasha.

His life work on the river began when he was fifteen years old. When nineteen he began piloting himself and as he soon demonstrated his skill and ability in handling rafts and men, he was constantly employed and by the best companies as long as the business lasted. We recall the excellent work he did on the side-wheeler "Clyde," then on the side-wheeler "L. W. Barden," running lumber for the Daniel Shaw Company, then on the new stern-wheeler "Gardie Eastman," several seasons running logs for Gardiner Batcheler and Wells of Lyons, Iowa; then on the fine large "C. W. Cowles," owned by Fleming Brothers of McGregor and later bought and operated by the Valley Navigation Company of which Captain Joe was president, and as master and pilot of the "Cowles" he ran logs to the Hershey mill at Muscatine and several others until the finish.

When rafting played out he operated the "C. W. Cowles" as a regular packet between LaCrosse and Dubuque, but realizing little profit in this, he sold her and went to piloting the big packets of the Streckfus Line in the Saint Louis and Saint Paul trade and remained on them for a while after they were converted into excursion steamers. He gave up this work to take the position of Deputy United States Marshal at Saint Paul, and while filling it most acceptably the final summons came to him October 29, 1918, and he was laid to rest in the town of his birth.

CAPTAIN CYPRIAN BUISSON

There were four of the Buisson boys. Antoine, the second, only made a few trips on floating rafts, then went to the Dakotas and took up farming. The other three, Henry, Joseph and Cyprian, stuck to the rafting game as long as it lasted, except that Henry enlisted in the Fifth Minnesota Infantry and served during the Civil War.

Their grandfather was Lieutenant Duncan Graham who commanded the small detachment of British troops that with their indian allies, defeated the United States force under Colonel Zachary Taylor at the Battle of Credit Island near Davenport on September 6, 1814.

Lieutenant Graham married an indian wife, probably of the Sac tribe, and their daughter was born on or near Credit island. Lieutenant Graham's duties took him to Minnesota for many years and this daughter married Joseph Buisson, a French-Canadian trader, who was an early settler in Wabasha.

Whether Mrs. Buisson, the mother of these four sons and three daughters, was a Sac or a Sioux, is in doubt, but one thing is sure: she had children of whom any mother could be justly proud. They all stood high in their old home town.

Cyprian, the third son of Joseph Buisson, was born in Wabasha, Minnesota, September 25, 1849.

His youth was spent mostly in learning and playing the games of the young Sioux who were his chosen companions. He was fond of hunting and trapping and became very skillful in using a gun or a canoe and always had both with him on the "B. Hershey."

Joseph, his next older brother, took more interest in school, but hard as he tried, he could not keep young Cyp at his studies when conditions were favorable for

Captain Cyprian Buisson of Saint Paul, Minn.

Twenty years on the steamer B. Hershey

hunting or trapping. He told me Joe gave him many a licking for running away from school.

But if Cyp did not learn much in school he learned a lot outside. Perfectly at home in the woods, he knew more about animals, birds, fishes, flowers and plants than any one I ever had the good fortune to know.

When only sixteen he began his work on rafts, pulling an oar for David Cratt on a lumber raft to Saint Louis. He quickly learned the river and began piloting himself. His first practice running a raft was when he and Jack Walker chartered the little "Novelty" in the late sixties.

Then he and his brother Joe went on the "Clyde" for three seasons.

In the spring of 1877 he came out as master and pilot of the fine, large, powerful raft-boat "B. Hershey," built at Kahlkes yard in Rock Island for the Hershey Lumber Company of Muscatine, Iowa.

For twelve successive seasons he ran their logs from Beef Slough, West Newton and Stillwater, making a record that nobody could beat.

Then the Valley Navigation Company was formed by Captains Cyprian, Joe and a few others. This company bought the "B. Hershey" of the Hershey Lumber Company, the "C. W. Cowles" of Fleming Brothers and the "Lafayette Lamb" of C. Lamb and Sons and Cyp remained on the "Hershey" for eight years more running logs for Hershey Lumber Company on contract, making twenty years of service on the one boat, clean, skillful, satisfactory service, all of it.

Then he wanted a change and going to Dakota he tried farming six years, but the lure of the river brought him back and he put in a few seasons rafting, working government boats, had charge of the steamer "Helen

Blair" in the Davenport and Burlington trade, and wound up his steamboating on the big side-wheeler "Morning Star" in the Davenport, Saint Paul and Stillwater trade, until the end of the season 1917, when ill health developed into serious and painful sickness terminating November 24, 1920.

He was first married August 18, 1876, to Elizabeth Stone of Wabasha, who died November 17, 1906.

In 1913 he married Lillian Enber of Saint Paul who gave him constant and loving care through his long illness and survives.

There were no children by either marriage, but they adopted, raised and educated three children who needed homes and parents and were fortunate in having such care and guidance.

Captain Cyp was a handsome man, very modest and gentle in speech and action but not afraid of anything or any person. A better pilot or more pleasant companion one could not find. He was the highest type of the real gentleman, whose memory we will always prize.

SAMUEL HITCHCOCK

In old floating days Sam Hitchcock stood high as an easy, skillful pilot.

He had rare knowledge of the draft of water at different stages and with his quiet manner and low voice he had excellent control of his crew.

When towing rafts came in vogue, Sam soon got the hang of that, and always had choice positions.

Ex-governor Van Sant writes me this about him: "Sam Hitchcock took to steamboat rafting very quickly and was a good handler as well as a good upstream pilot.

"In 1874, when I began running rafts on contract, I

hired Sam Hitchcock for the 'D. A. McDonald,' agreeing to pay him one-third the net profit after all expenses were paid out of earnings.

"I have had a good many good pilots in my time but none ever did better work and I learned much from him about the business that helped me greatly. At the end of the season I paid him $2650.00 as his share. That was good pay then for six months' work, but he earned it. He was an even-tempered, pleasant man to work with. Captain Hitchcock was on the towboat 'Minnesota' with Captain A. R. Young of Stillwater many years.

"His last work was with me on the 'Last Chance' in 1882 and got off on account of illness that soon took him off."

CAPTAIN PAUL KERZ

Captain Paul Kerz was born October 15, 1837, at Nackenheim, Hessen-Darmstadt, Germany. His father was a mill-owner. At the age of seventeen, the son left home for America and arrived at Buffalo in the fall of 1854. From the spring of the following year dates his residence in Galena, Illinois. On arriving there he engaged in flat-boating with Adam and Stephen Younker, but subsequently engaged in the meat business with Jacob Koehler. After a year at that trade, he returned to boating and in 1862 he with Stephen Younker and Ben Lambertson of Bellevue, Iowa, bought the steamer "Charley Rogers," which they operated between Bellevue and Galena until 1868, when they sold it and bought the "Sterling."

In 1870, Captain Kerz began rafting with the "Sterling." Two years later he sold the "Sterling" to W. J. Young of Clinton and entered the employ of W. J.

Young as commander first of the "Sterling" and afterwards of the "J. W. Mills." Later he superintended the building of the "Douglas Boardman," at the boat yards at Eagle Point and became its first commander. Afterwards he superintended the building of the "W. J. Young, Jr." and became its commander in 1882 and was its commander at the time of his death, although he claimed that he was going to retire from the steamboat business that fall. He had been made commodore of the entire Young fleet and had absolute charge of the steamboat business of the W. J. Young and Company, and his recommendations governed all of the appointments of the officers of the fleet. He died quite suddenly at Galena, December 19, 1893, while walking home from town.

Captain Kerz left surviving him his widow, Barbara Kerz, who later died, September 18, 1925; a daughter, Barbara Heid, still living; and a son, Adam. The latter followed in the footsteps of his father as a river pilot, and was with him to the time of his death. He later went with Captain Winans on the "John H. Douglass" and "Saturn" and after spending several years on the Yukon on the "Julia B.", owned and operated by the Yukon Transportation and Trading Company, composed principally of Galena residents, he entered the employ of the United States Government on its fleet of river boats and was employed on the "Coal Bluff" when he took sick at Hannibal, Missouri, and after being brought to his home at LaCrosse, Wisconsin, died in 1908.

He was further survived by a son, Philip Kerz, still living at Dixon, Illinois, and employed by the International Harvester Company, and by his youngest son, Paul Kerz, an attorney, with offices at 11 South LaSalle

Captain Paul Kerz of Galena, Ill.
On steamers J. W. Mills and W. J. Young, Jr.

Street, Chicago, formerly City Attorney of Galena, Illinois, and also County Judge of Jo Davies County, Illinois.

If there ever was a man who really loved his work it was Captain Paul Kerz. I never knew any one else who worked so many hours and slept so few, and no one ever heard him complain of want of sleep or over-work.

He was thoroughly loyal to his employers, to his family and his church, and he had the complete confidence of all who knew him.

Captain Kerz demonstrated the truth of the old saying, "He succeeds best who is most wedded to his task."

CAPTAIN JOHN McCAFFREY

No story of the rafting business can be told without including John McCaffrey's part in it.

At an early age he went on the river with his brother-in-law, George Tromley, who was considerably older than himself and already a floating pilot with established reputation who was running logs and lumber on contract.

Young Jack, as he was called, acted as clerk and pulled an oar in bad places. He learned the river in a short time and soon got into the game on his own account.

I don't know how he learned to handle a steamboat but he was running the "Clyde," towing lumber in 1870.

In 1871 he bought one-half interest in the steamer "James Means" of Van Sant and Son and he made a very handsome profit with her and the "LeClaire Belle" in the next five years. He then sold out and quit the river for four years. He had received an injury by a fall on a raft which gave him a lot of trouble, but by

surgery, good treatment and rest he got well enough to do some more profitable work on the river and he owned a big interest in several raft-boats including the "Last Chance," "Pilot," "Ten Broeck," "Jo Long," "Robert Dodds," "Helene Shulenberg" and "Charlotte Boeckeler."

About 1895, Captain McCaffrey bought the Diamond Jo Line steamer "Mary Morton" more to encourage his sons and give them a chance than to carry out any ambition of his own.

He also bought a coal mine over on Rock river and the little steamer "Duke" and barges to bring coal out through the Hennepin canal to Davenport.

Captain McCaffrey had two fine properties at Tenth and Brady Streets in Davenport. He lived in one and converted the other into an apartment building, which was always in demand.

He was located pleasantly and taking life easy. He was a popular member of the Piute Club and had a bunch of cronies, lawyers and doctors, whose society he enjoyed. We thought he was anchored here to stay when all at once he sold out, bought a lot of good rich land cheap on account of the boll weevil scare, lying on the west side of the Mississippi across from Vicksburg, and started late in life to improve and develop this land into good cotton plantations.

The captain would have made a great success of this venture, but his health gave out and his busy life came to a sudden ending at the Kellogg Sanitarium at Battle Creek, Michigan. I tried to get a photo of the captain taken with the full beard and mustache, as I knew him first, but could not find one.

CAPTAIN ROBERT DODDS

I started to write something about this man who held high place in the esteem of his employers, his crew and his fellow pilots, when it came to me that a man who had been closely associated with Captain Dodds for many years had written an article published in the Saint Louis *Waterways Journal* about him soon after his death.

Mr. Harris has kindly furnished me a copy of that letter, describing Captain Dodds correctly. It is much better than I could have done it.

Chicago, July 27, 1903.

GENTLEMEN: In your issue of July 25, a five-lined notice tells the world of the death of Captain Dodds, a retired steamboat officer, who was found dead at his home on Thursday, July 23rd, and that his death was due to heart failure, hence sudden.

The meagre notice conveys but an inadequate idea of the peculiar position that the late Captain Dodds held in the army of steamboat men, for what Edwin Booth was to the stage, Charles Dickens to literature, Darwin to science or Beecher to theology, Robert Dodds was to the pilot's profession, holding a distinct and peculiar position.

It would be somewhat difficult doubtless, to define his true status or to explain why he held such an honored place in the realm of steamboat officers.

Captain Robert Dodds, or Bob Dodds, as he was familiarly known, commenced his river life as a floating raftsman, and becoming a pilot before he had reached his majority. A man of pleasing presence, handsome in appearance, tasty in dress, without being lavish, courteous in manner, proficient in conversation, and lastly, giving to money no apparent value, and being a large money earner at a very early stage, he developed eccentricities of character, if we may use the expression, that established him as a prince of good fellows.

Captain Dodds floated rafts for Schulenburg and Boeckeler for a number of years, and with the advent of the steam boat for the purpose of towing rafts, he took charge of the Pittsburg towboat, "Grey Eagle." After operating this boat for one or two seasons, she turned over at the foot of Stag Island upon the first trip in the spring, Cap-

tain Dodds being at the wheel. This was followed by the purchase of the steamer "M. Whitmore," and was followed in turn by the building of the steamers "Helene Schulenburg," "Charlotte Boeckeler," and "Robert Dodds," over which fleet the captain presided as commodore.

About the year 1888 or 1889, the Schulenburg and Boeckeler Company disposed of their steamboat interests to Captain John McCaffery, and for one season, Captain Dodds commanded one of the steamers, which, however, ended his active service upon the river.

It was my privilege to have been associated with the deceased officer from 1874 to 1886 inclusive, during which time, I necessarily learned to know him intimately, although I could add nothing more in the way of eulogy than has already been said in the earlier part of this communication.

Captain Dodds was a magnificent executive officer, one of those few men in the world who could maintain a degree of equality with those under his command, and yet retain to the fullest extent their admiration and esteem. As a commanding officer, he was a strict disciplinarian, exercising authority, however, with such a warmth of sunshine that men obeyed for the love of obedience rather than from fear of the consequences.

Every walk of life is marked by particular exemplifications of the attributes necessary to reach success, and in the pilot's profession there was, during the active career of Captain Dodds, no man who possessed more fully and completely, the high qualities required to reach the ends aimed at. Yours very truly,

JAMES HENRY HARRIS.

CAPTAIN J. M. HAWTHORNE

J. M. Hawthorne was born at Erie, Pennsylvania, November 20, 1839. When he was eleven years old the family moved to Illinois and later to LeClaire, Iowa, in 1856.

Joseph began working on the river when he was eighteen years old as cabin-boy on the steamer "War Eagle" of the Galena and Minnesota Packet Company.

He soon left this job to pull an oar on a floating raft with the noted pilot J. T. R. Lindley, better known as

Captain J. M. Hawthorne of LeClaire, Iowa
88 November, 1927. Still piloting

"Kentuck," and under his direction young Hawthorne soon learned the river from Stillwater and Saint Paul to Saint Louis.

In 1860 he followed the Gold Rush to Pikes Peak but failing to strike a pay streak, he came back in 1861 and began piloting rafts himself. He was a keen observer, watching the river closely and learned the drafts of water at different stages and became what was called an "easy floater." He was easy on the crew and was a favorite pilot because he gave the men no unnecessary pulling.

Going back up river with his crew on the regular packets, he rode much of the time in the pilot houses, became well acquainted with the pilots and learned how to steer and handle a steamboat and secured a first class pilot's license in 1872. He has had many reissues, the last in May, 1927.

He bought the side-wheeler "Viola" of Durant and Hanford soon after getting his license and he continued running rafts with towboats either for himself or others as long as the business lasted. Since rafting days he has had various employments mostly on government boats in improvement work.

He has lived in LeClaire since 1856 except the one year in Colorado and he holds a certificate from the Grand Lodge of Iowa given to Masons in good standing who have paid dues for fifty years.

Captain Hawthorne has never used glasses to read nor has he ever had a razor on his face.

He was eighty-eight last November but is still active and healthy. His eyes still have the old merry twinkle and he enjoys a joke or a good story as well as if he was sitting on a bunch of shingles on the corner of a floating raft.

CAPTAIN SAM R. VAN SANT

The subject of this sketch is at the age of eighty-three still enjoying good health and stands a fair chance of outliving nearly all who were engaged with him in the rafting business and securing the proud distinction of being the last survivor of the Grand Army of the Republic of which he is a Past Commander.

The Captain was thirty-three, when at twenty-one I entered his employment as clerk and watchman on the "LeClaire Belle" in March, 1878.

He took great interest in my work and gave me every encouragement to learn the river.

In the spring of 1881 he gave me the chance to invest in a one-sixth interest in the "Last Chance" which led a year later to the organization of the LeClaire Navigation Company, of which he was manager and I was captain and pilot on its best raft boats.

We were always glad to have him with us for a day, or a trip. He was full of fun, life and ambition; always encouraging us to do our best. Good work and good behavior never failed to secure recognition and approval and he was very kind and charitable to those who failed or went wrong – even when it resulted in considerable loss to him.

His acquaintance and sociability were not confined to the officers "up stairs." He soon knew every one on board and was always popular with those on the lower deck.

But while friendly and sociable his manner always commanded respect. He was very active then and as strong as a young lion and "woe be" to any foolish person who underestimated his ability to take care of himself in a scrap.

In March, 1881, he moved from LeClaire to reside

Captain Sam R. Van Sant

President Van Sant and Musser Transportation Company and LeClaire Navigation Company

in Davenport. He came down to the landing while I was sending out the last load of his household goods that we brought down on the "Silver Wave." I had two green men who persisted in going up to get a drink when they felt like it, and were beginning to show the effects of three or four such absences in spite of my warnings.

When Captain Sam came back in the deck room he asked, "What's the matter here, boys?" Not giving me time to explain they told him what they were doing and what they were going to do. He grabbed those men, slammed them together, threw them down, slapped their faces and then made them stand up and listen while he told them a few things that I am sure they remembered.

As related elsewhere in this volume, the firm, Van Sant and Son of LeClaire, Iowa, were pioneers in building real raft-boats.

The success of the "J. W. Van Sant" from their yard in 1870 stimulated and encouraged others to build similar boats. Some of these were built at LeClaire. The LeClaire yard soon had plenty of repair work during winter and early spring, but the decline in the packet business and the absorption of the old Northern line by the Davidsons diverted a large summer repair business to Davidsons yard at LaCrosse, Wisconsin.

Captain Van Sant always took a great interest in politics, but never aspired to official position until he removed to Winona in 1884.

He was elected to the state legislature and on his third term was chosen Speaker of the House. While holding this position the appropriations were made for the new Capitol and during his two terms as governor the present, splendid building was completed and dedi-

cated, completely finished and furnished with several thousand dollars left of the appropriation.

When the captain closed out and sold his raft-boats at the end of the game he had made more profit than any one else who had been in the business of rafting only and by timely and judicious investments in Minnesota farms, he greatly increased his competency and can take life easy and enjoy his mounting years. In his case I cannot use the term "declining years" for he is not declining – he is just maturing.

During our fifty years of association, through storm or sunshine, high water or low, good luck or bad, in buying boats or selling them, I always liked to have him with me. I always admired his intelligence and good judgment, and thoroughly enjoyed his fine, loving companionship. Though separated now, it is a great satisfaction to know I still have his confidence and his friendship.

The governor, as we have learned to call him, and his estimable wife have made their home for fifteen years in the Leamington hotel in Minneapolis, but they always spend the winter months in or near Tampa, Florida.

Sawmills and their Owners

I can only tell about those in operation at different points along the upper Mississippi while I was in the rafting business. There were many small and a few large mills on the Saint Croix, Chippewa and Black rivers that sent out an immense quantity of rafted lumber to be taken to the many down river yards; but I had no line on their activities; and as the office of surveyor-general of logs and lumber in Wisconsin was abolished four years ago, I am unable to get at the records to compute the output of these mills, that supplied the yards of

Knapp, Stout and Company at Dubuque, Fort Madison and Saint Louis.

P. J. Seippell Lumber Company at Dubuque.

Rhodes Brothers at Savanna.

Daniel Stanchfield at Davenport.

S. G. Stein and Company at Muscatine.

Gilbert-Hedge and Company at Burlington.

Rand Lumber Company at Burlington and Keokuk.

A. S. Merriam and Company at Quincy.

John J. Cruikshank at Hannibal

LaCrosse Lumber Company at Louisiana.

LaCrosse Lumber Company at Clarksville.

Shulenburg and Boeckeler at Saint Louis.

Eau Claire Lumber Company at Saint Louis.

Methudy and Meyer at Saint Louis, and others.

A large part of the lumber to these yards was hauled out, piled and seasoned and then shipped west to build

homes, barns and fences in Iowa, Nebraska, Missouri and Kansas.

STILLWATER, MINNESOTA

The big Shulenburg and Boeckeler mill later owned by Isaac Staples, E. L. Hospes and Samuel Atlee and finally owned by Geo. H. Atwood who cut forty-eight million feet of lumber a season.

Hersey Bean and Brown mill; which in 1892 came under the management of George H. Atwood.

The Saint Croix Lumber Company.

The East Side Lumber Company (Bronson and Folsom mill).

South Stillwater mill (Durant and Wheeler and David Tozer).

Hershey Lumber Company mill.

R. W. and A. R. Turnbull mill at Lakeland.

The Eclipse Sawmill Company at South Stillwater.

The Fall and McCoy mill at Lakeland.

The Musser-Sauntry mill.

HUDSON, WISCONSIN (Mouth of Willow River)

The Purington mill, built 1850. Destroyed by fire. It was replaced in 1883 by a modern mill owned by the Hudson Lumber Company, that cut 700,000,000 feet and sent the last raft down the river in 1915.

GLENMONT, WISCONSIN

Olds and Lord mill – later owned by Gillespie and Harper.

PRESCOTT, WISCONSIN

The John Dudley mill.

RED WING, MINNESOTA

The Red Wing Mills Company, the Charles Betcher mill.

WINONA, MINNESOTA (Four large mills)

Youmans Bros. and Hodgins – 1856-1898.
Laird Norton and Company started in 1857.
Winona Lumber Company started in 1881.
The Empire Lumber Company started in 1887.

LA CROSSE, WISCONSIN (at mouth of Black river)

C. L. Colmans mill.
John Pauls mill.
N. B. Holways mill.
Sawyer and Austins mill.
G. B. Trows mill.
P. S. Davidson Lumber Company mill.
McDonald Brothers mill.

LANSING, IOWA

Lansing Lumber Company, John Robson of Winona, principal owner and manager.

McGREGOR, IOWA

W. and J. Fleming mill, C. W. Cowles, Manager.

PRAIRIE DU CHIEN, WISCONSIN

Stauer and Daubenberger mill.

GUTTENBURG, IOWA

Zimmerman and Ives mill.

DUBUQUE, IOWA

Knapp, Stout and Company's mill.
Ingram, Kennedy and Day, later Standard Lumber Company.
M. H. Moore's mill.

BELLEVUE, IOWA

Dorchester and Huey's mill.

LYONS, IOWA

Gardiner, Batcheler and Welles mill No. I.
Gardiner, Batcheler and Welles mill No. II.
Lyons Lumber Company mill.
David Joyce's mill.

FULTON, ILLINOIS

David Joyce – the old Langford and Hall mill.

CLINTON, IOWA

Clinton Lumber Company.
W. J. Young and Company, The Upper mill.
C. Lamb and Sons, The Stone mill.
C. Lamb and Sons, The Brick mill.
W. J. Young and Company, The Big mill.
C. Lamb and Sons, Riverside mill.
C. Lamb and Sons, Riverside mill, lower.

CAMANCHE, IOWA

W. R. Anthony, successor to Anthony and McCloskey.

PORT BYRON, ILLINOIS

Fred S. Gates mill.

LE CLAIRE, IOWA

J. W. Strobeen, the old Van Sant and Zebley mill.

MOLINE, ILLINOIS

Dimock, Gould and Company, originally a water power mill and manufactured tubs, pails, washboards, etc.

The J. S. Keator and Sons mill, started in 1859.

ROCK ISLAND, ILLINOIS

Mills on Sylvan Water Slough between the water works and the C. R. I. and P. station, owned and oper-

ated from 1878 by the Rock Island Lumber Company, in which Weyerhaeuser and Denkmann held the controlling interest. Previous to 1878 the style of the operating firm was Anawalt, Denkmann and Company.

Mill of Weyerhaeuser and Denkmann at the lower end of Rock Island. In 1857 the firm of Mead, Smith and Marsh operating this mill got in financial trouble and the mill was shut down. Mr. Fred Weyerhaeuser, who was in their employ, took hold of the property and operated it on his own account. When the affairs of Smith, Mead and Marsh were finally closed up the mill was offered for sale. In 1860 Mr. Weyerhaeuser and his brother-in-law, Mr. F. C. A. Denkmann, bought this mill for $3000.00. They operated it continuously and very successfully until the log supply was exhausted. They made extensions and improvements increasing its output until it was known as one of the "big mills" sawing over forty million feet annually.

DAVENPORT, IOWA

The Lindsay and Phelps mill at Stubbs' Eddy was erected in 1864. It had the advantage of an excellent place to land and hold their rafts in the Eddy. This mill had a long and very prosperous run with the same ownership and when it had to close for want of more logs to saw, it was dismantled, and the lumber yard cleared off and generously given to the city for what has become the leading feature of East Davenport, Lindsay Park.

In 1868 L. C. Dessaint built a sawmill just above the water works. It was later owned by Price and Hornby. In 1874 George W. Cable bought it and later organized the Cable Lumber Company which operated the mill until the supply of logs was exhausted.

The Renwick mill, built in 1854, operated by Renwick and Son, later by Renwick, Shaw and Crossett and last by Weyerhaeuser and Denkmann. Was an extremely hard place to land and hold logs as the water was not deep but very swift.

In 1849 Strong Burnett built a saw and planing mill at foot of Scott street, later operated by Dessaint and Schricker, then by Schricker and Mueller and after 1883 by Chr. Mueller and his sons, later incorporated as the Mueller Lumber Company, still a going business.

In 1849 a Mr. Howard built a mill about Warren street, later owned by French and Cannon and then by French and Davies. It was later operated by Paige and Dixon and under the management of Mr. E. W. Dixon. Its career was interrupted by the financial complications arising from the suicide of Mr. S. B. Paige of Oshkosh, Wisconsin, who killed himself in his room in the Burtis House one Sunday afternoon in March, 1883. After the tangled affairs of Paige and Dixon had been cleared away, a new company called the Davenport Lumber Company took hold of the old mill and started sawing in 1887. S. J. Keator was president and Henry Jager was manager. They pushed the business with vigor and success until their log supply gave out and the mill closed for good in 1891.

"Mueller Lumber Company's new mill" at Cooks Point. The old mill at Scott street burned in 1901. The larger, modern mill was erected in 1902 and continued sawing until the logs gave out in 1907.

As stated elsewhere, our company took care of all Mueller logs wherever rafted and supplied the old mill from March, 1887, until it burned in 1901, and we supplied every raft cut at the new mill during its prosperous run.

STEAMER MORNING STAR

Built in 1911. 250 feet long, 70 feet wide, over all. She had excellent passenger accommodation and could carry eight hundred tons of freight. On her first trip, with a special party, she went from Davenport, Iowa, to the mouth of the Mississippi, 110 miles below New Orleans and from there to Saint Paul, Minn., and back to Davenport. The author was in charge until 1918 when she was sold to a Cincinnati company. She was the last large boat in the Saint Paul trade

We never had a difficulty of any kind or any unpleasant experience with this company during the twenty-one years we handled their logs which ran about fifteen million feet annually. Our work for them amounted to $360,000.00.

MUSCATINE, IOWA

The Muscatine Lumber Company mill, burned in 1886.

Hershey Lumber Company mill, started by Jacob Hershey in 1852, was in control of Benjamin Hershey until his death and continued sawing to the last of the logs. My first contract, when I got charge of the steamer "Last Chance" in 1882, was to run ten million feet of logs from Beef Slough to this mill.

The Musser Lumber Company had a large mill that sawed about forty-five million feet annually. Richard Musser, Peter Musser and P. M. Musser were all fine men. I was clerk on one of the Van Sant and Musser raft-boats for three seasons and did occasional work for them later. Their mill was built in 1870 and it was vigorously operated every season. The Van Sant and Musser boats earned over a million dollars towing for the Musser Lumber Company.

The Burdick mill in South Muscatine, for a time owned by Benj. Hershey, was sold by him in 1893 to John Kaiser who incorporated the South Muscatine Lumber Company.

BURLINGTON, IOWA

The Harmar Manufacturing Company mill.

The Burlington Lumber Company had a big mill that had a long, steady and prosperous career.

FORT MADISON, IOWA

S. and J. C. Atlee mill ran steadily until the last. The

old mill is still there and the business is carried on handling southern and western stock.

KEOKUK, IOWA

The Taber Lumber Company built a new mill when the old one burned and continued sawing after nearly all others had quit. Captain Taber, who had been in command of steamers in the Saint Louis and New Orleans trade, one of which was the famous "Ruth," was fatally injured by an automobile only a few years ago. The mill has been dismantled but the business has been carried on by his sons, Ben and Carroll Taber.

CANTON, MISSOURI

The Canton Sawmill Company had a medium sized mill.

QUINCY, ILLINOIS

The Quincy Sawmill Company had a mill up in the bay.

HANNIBAL, MISSOURI

The Hannibal Sawmill Company had a good mill.

SAINT LOUIS, MISSOURI

Shulenburg and Boeckeler mill.
Knapp, Stout and Company mill.
Hill-Lemmon and Company mill.
H. S. Parker and Company mill.
C. F. Leibke mill.

Complete List of Raft Pilots, 1840-1913

The following facts about raftmen and rafting and the complete list of all pilots engaged in the work in any part of the period from 1840 to 1913, are taken from an article in the Davenport *Democrat* and republished in the *Waterways Journal*, December, 1913. [The list was very carefully made up and I had many to help me. If we have missed any one, we have not been reminded of it since. In January, 1928, I only can count thirty of the list above.]

The towboats are sunken and disintegrated hulks, the bones of many being the relics of an almost forgotten industry are strewn along the shores of the river. A few – and what a few they are – are working as sand-boats and towboats and general river craft.

The great rafting traffic on the big river, in its infancy in 1841, slowly matured year by year, growing larger with each succeeding yearly cycle until in the year 1880, the river traffic of rafts was reckoned one of the largest and most profitable industries in the United States.

Then came the decline. Late in the eighties the rafts coming down the Mississippi began to fall off in numbers, the towboats plying up and down the river to be fewer and fewer and gradually but surely the business dwindled. The falling off of the river traffic has continued until the present year when during the entire season, but three rafts went down.

Towed by "Ottumwa Belle"

These three reminders of the old days were towed through by the "Ottumwa Belle," the only survivor of the great fleet of ninety raft-boats that were in the business on the crest of the wave in 1880. The season of 1914 will see the end of the rafting business, when the "Ottumwa Belle" will take three rafts through, the last three rafts ever destined to go down the river, and the knell of the once great traffic will be rung. The "Ottumwa Belle" is owned by S. & J. C. Atlee of Fort Madison. The master of the "Belle" is Walter Hunter, one of the few remaining raft pilots.

And the masters, pilots and crews who manned the big fleet! Of the army of pilots, numbering over two hundred and fifty, who were the guardians of the fleet in their trips up and down the river thirty years ago, but seventy-three are known to be living. There may be other survivors, but they are not known to Captain W. A. Blair, who has compiled the complete list of those who were engaged in piloting in the early days.

Of the seven-three members of the profession, for it was indeed a profession, several have attained high places politically, others have abandoned the river and taken up a less romantic vocation, and still others have drifted to other navigable rivers to continue their chosen work.

Old River Men Meet

Prominent among the one-time raft-boat pilots is Colonel E. W. Durant, who is perhaps one of the most noted members of the body. Colonel Durant, who was once Lieutenant-governor of Minnesota and twice served his state as state senator, at the age of eighty-four years is hale, hearty, healthy and happy.

He is an ardent follower of Isaac Walton and likes nothing better than sunning himself with a fishline in hand. He is also a great story-teller.

On a trip of the "Morning Star" in 1912 from Davenport to Saint Paul, I had Colonel Durant and Captain S. B. Hanks as my guests and I greatly enjoyed their company and their reminiscences and they aided me in completing and checking up the list of raft pilots which I had prepared with the help of Captains Cyprian and Joseph Buisson and John Monroe. Captain Hanks piloted his first raft from Stillwater to Saint Louis in June, 1844. His death occurred in August, 1913, at the age of ninety-four.

Three in Old Guard

Three pilots, S. E. Lancaster of LeClaire, Iowa, O. J. Newcomb of Pepin, Wisconsin, and Morrel Looney of LaCrosse are still following their chosen vocation on the Yukon river in Alaska during the summer months. Others well known are Peter Kirns of Saint Louis, who for years was engaged in that business in Saint Louis.

John McCaffrey, another of the old-time pilots, is a planter in Louisiana. Captain McCaffrey is a teller of wonderfully interesting stories of the old river and raft-running and is not at a loss for listeners.

Joseph and Cyprian Buisson, two of the pioneers, are still piloting on the Mississippi. Cyprian was master of the steamer "Helen Blair" last year and Joseph Buisson piloted the "St. Paul" during the past season.

Three of the living river pilots are located in Clinton. Joseph Duley is at the present time engaged in the unromantic calling of liveryman, but secretly his thoughts turn to his first love and he enters the sand and gravel business "to get the river smell," he says. O. P. McMa-

hon and A. E. Duncan, also of Clinton, have retired from business with a comfortable fortune. The latter two were designers and builders of the steamer "Silver Crescent."

List of Old Pilots

In the following list of old river men, who piloted rafts down the river, those marked with a star are known to be living, while the others which are by far the greater, have run their last line:

John McKane, W. B. Newcomb, S. B. Hanks, "Sandy" McPhail, Wm. Ganley, Phileas O. Lawrence, Nelson Allen, Edward Whitney, Surveyor Bruce, Patrick Fox, Pembroke Herold, Geo. Herold, David Hanks, Samuel Hanks, Daniel Davison, Chas. Davison, Aaron Winans, George Winans, Mahan Winans, David Wray, John Wray, Edwin Efnir, E. W. Durant, George Penney, Wiley Penney, John Hanford, W. A. Payne, John Gabriel, Samuel Register, Jos. Perro (Big Jo), George Brasser, D. A. McDonald, Robert Dodds, Hiram Cobb, Wm. Dorr, Charles Rhoads, Steven Rhoads, Peter Carlton, Aug.Barlow, Samuel Macey,, Wm. Elliott, C. G. Bradley, R. J. Wheeler, Harry Wheeler, Ed. Root,Alfred Whithrow*, Thos. C. Withrow, Steven Withrow, Wm. H. Whistler, James Whistler, Nelson Whistler, John Goodnow, Joe Denvier, Frank Wild, George Wallace, Charles Short, A. M. Short, G. L. Short, J. E. Short*, I. H. Short, Harry Short*, L. A. Day*, John McCaffrey, James Hugunin, Harry Hugunin, John Hugunin, Cornelius Knapp, Ira Fuller, Wm. York, A. J. Chapman, Caleb Philbrook, John Cormack, Washington Allen, John Monroe, Abram Mitchel*, W. S. Mitchel, Brainerd Mitchel, John Leach, Daniel McLean, James Newcomb*, Isaac

HENRY WHITMORE

Engineer – Fitted out first real rafter

Newcomb*, H. L. Peavey, George Rutherford, Jack Walker, Thos. Forbush, Sherman Hallam, C. B. Roman, Wm. Kratka, Robt. Irwin, Wm. Davis, Gordon Davis*, Jack Davis, John McCarty, Peter O'Rourke, Thos. O'Rourke, Patrick Gainor, John Gainor, Asa Woodward, John Gilbert, John Seabring, John Hoy, Thos. Hoy, Walter Hunter*, Ira DeCamp, Wm. Weir*, Frank Newcomb, Rufus Newcomb, James Haggerty, Jos. Sloan, A. T. Jenks, Geo. Carpenter, Alf. Carpenter, Chris Carpenter, Ed. Huttenhorn*, Wm. Slocumb, W. R. Slocumb, Henry Slocumb, Herbert Miliron, Edward Miller, Albert Shaw, J. T. R. Lindley, Daniel Flynn, Frank Wetenhall, Ed. Grant, John Lancaster, Jos. Hawthorne*, Isaiah Wasson, John Rook*, R. B. McCall, Geo. Trombley, Geo. Trombley, Jr., R. H. Trombley, E. J. Chacey, I. L. Chacey, James Gleason, Toliver McDonald, O. P. McMahon, A. E. Duncan*, Thos. Duncan, J. G. Moore, Wm. Wooden, Paul Kerz, Paul Gerlach, Wm. Desmond, Jas. Rellis, Chas. Slocumb, Wm. Savage, Henry Buisson, Joseph Buisson, Cyprian Buisson, Frank LePoint, Antoine Roque, James Butts, Thos. Wilson, Al Martin, Vol. A. Biglow, Samuel Hitchcock, I. B. Jenks*, Daniel Shea, Joe H. Young*, Charles White*, Rueben Owens, Vetal Burrow, Thos. Dolson, H. L. Ryder, Jacob Ressor, Geo. Martin, Peter Kirns, John O'Connor, John Bradley, Andrew Larkin, Wm. Dobler, Jerry Turner*, Hiram Brazee, Gary Denberg, O. E. McGinley, James Coleman, Perry Langford, Hugh McCaffrey, Jack Young, Russell Smith, Al Hollinshead, Horace Hollinshead, D. C. Law*, Frank Bernard, St. Germain, E. D. Dixon, French Martin, Russell Baldwin*, Sam Johnson, John McKinzie, Christ Adolph, O. J. Thompson, W. H. Blair*, W. A. Blair*, A. R. Young, Jos. Duley*, S. E.

Lancaster*, James Follmer, Carl Looney, Frank Looney, Morell Looney*, Cyrus King, Peter Hire, George S. Nichols*, Thos. Peel, Vincent Peel, John Hampton, Frank Diamond, John Cheshire, Dan Rice, John Quinlan*, Adam Kerz, Adam Yonker, John McDonald, John Schmidt, Lysander Darling*, Silas Alexander, W. W. Gordan, Henry Fuller, R. M. Cassidy, Lafe Egan, Lee Short*, David Cratt, Harvey Smith, Peter Smith, Hugh Johnson, Andrew Lambert, Joe Guardapee, Boyd Newcomb, Al Knippenberg*, Owen Corcoran, David Lamb, Frank McIntyre, Sherman Brown, Henry Stafford, Wm. Smith, N. B. Lucas, Wm. Young, Robt. Roundy, Peter Larivere, John Pearson*, Henry Walker, John Laycock*, Wm. Buchanan, Robt. McLarney, John Fuller, Jos. Blow, David Parmelee, William Simmons, Christ Seeford, Albert J. Hill, John McCarty (Mushrat), Wm. McCaffrey, John Langford, C. W. Schricker, Edward Dunham, John Parker, Charles Barnes, David Philamulee, A. O. Day*.

Of the thirty pilots in the foregoing list who were alive January 1, 1928, only nine were still in service on the Mississippi during the season of 1927, viz:

J. M. Hawthorne on the United States towboat "Louise."

J. H. Laycock on the United States towboat "Minneapolis."

Isaac Newcomb and William Weir one trip on the "Altair" of Wabasha.

W. L. Hunter in Streckfus Line and on United States towboat "Genl. Ashburn."

Harry Short on the steamer "Kalitan."

Joe Young on the towboat "Lone Deer."

Chas. White on the United States towboat "Genl. Ashburn."

W. A. Blair in the Streckfus Line and on the United States towboat "C. C. Webber."

Rapids Pilots who handled Rafts over the Upper, or Rock Island Rapids, in the Order of their service from 1840-1915

Philip Suiter
John Suiter, son of Philip
William Suiter, son of Philip
Jacob Suiter, son of Philip
John Suiter, son of John
Zach Suiter, son of John
Harvey Goldsmith
Silas Lancaster
William Rambo.
DeForest Dorrance
J. W. Rambo, son of William
Oliver P. White
J. N. Long
Dana Dorrance
Durbin Dorrance
Orrin Smith

All in this list have made "the last crossing" except Orrin Smith who is still in active service as master and pilot of the towboat "Lone Star," owned by the Builders Sand and Gravel Company of Davenport.

Orrin Smith is a son of John Smith who did long and excellent service in piloting the large and heavily-loaded packet steamers during the busy years from 1860 to 1885 when they carried full cargoes of freight and

passengers. John Smith had a rare combination of nerve, caution and skill, with ambition and energy to use his gifts, and his work was high class. Masters and owners had confidence in his judgment and his skill. He was a "sure shot" if there ever was one and Orrin is just like him. He is the youngest and last Rapids pilot to run rafts over the Rock Island rapids. His work has been equal to the best done by any of those older and with more experience.

All these Rapids pilots lived in LeClaire and all of them died there except Joseph N. Long who left his old home town many years ago, went to the Columbia river, and died, we think, in Portland, Oregon; and Orrin Smith is living in the fine old home where he was born.

J. W. Rambo was born in Rapids City, Illinois, August 27, 1844, and was only ten days old when the family moved over to LeClaire where he lived until his death, January 30, 1925.

Captain Rambo was Master of Snow Lodge, A. F. and A. M., 1879-1883 inclusive and was elected Mayor of LeClaire, 1886-1887-1890 and 1892. His wife and only daughter, Mrs. B. J. Metzgar (Nellie), survive him.

Rapids Pilots who ran Rafts over the Lower, or Des Moines, Rapids

William West, lived at Prices Creek.
Valentine Speak, died at Montrose, 1880.
R. S. Owen, died at Montrose, 1898.
J. P. Barber, died at Montrose, 1915.
Sam Speak, died at Montrose, 1900.
Charles Speak, died at Mt. Pleasant, 1895.
Sam Williams, died in California, 1878.
Chas. H. Farris, living in Montrose, well and active at seventy-eight.

When the old canal was finished in 1878, the work of the Rapids pilots was greatly reduced, as rafts could be put through the canal in less time and with less expense and damage in extreme low water than working them over outside.

Then in 1913, when the Keokuk dam was completed, there was no more work for Rapids pilots on any craft between Montrose and Keokuk.

Captain Charles Farris made his last trip as a Rapids pilot, taking the big "Morning Star" down and back on a special sight-seeing trip when the dam was completed and the old Rapids submerged nearly all the way up. There were three locks in the old canal, each eighty feet wide and three hundred feet long.

During the busy years of rafting, Captain Joseph Farris was in charge of the Guard lock, at the upper end, at the village of Galland.

Nicholas McKenzie was in charge of the middle lock. He was the father of Captain Hugh McKenzie and grandfather of Louis McKenzie, now in the crew that operates the big single lock that passes vessels from Lake Keokuk to the river level below or contrariwise.

John R. Carpenter had charge of the Lower or Keokuk lock and Major M. Meigs was in charge of the entire canal dry dock and machine shop.

Major Meigs and John Carpenter are now (1928) living quiet, retired, but healthy and happy lives in Keokuk.

Chief Engineers of the Rafters

This list is by no means complete, as I am unable to find any list made out by any one else; so must depend on memory with a few suggestions from friends glad to assist me in this work.

I can only name the engineers who were on rafters long enough to become identified with the rafting industry, as distinguished from the packet business or the sand and gravel industry, and then my memory is limited to those whose work and reputation were above the average, viz.:

Henry Whitemore	Galena, Illinois.
William Myers	Galena, Illinois.
George Griffith	Galena, Illinois.
Conrad Kraus	Galena, Illinois.
James Hunt	Savanna, Illinois.
A. C. Van Bebber	Savanna, Illinois.
Henry Bingham	Savanna, Illinois.
Harry Beasley	Sabula, Iowa.
Wm. Edwards	Clinton, Iowa.
Wm. Krause	Clinton, Iowa.
Fred Hufman	Clinton, Iowa.
George Rockwood	Clinton, Iowa.
James Duncan	Clinton, Iowa.
James Cary	Clinton, Iowa.
B. B. Rockwood	Clinton, Iowa.
John McKeever	Clinton, Iowa.
Sam Mikesell	Clinton, Iowa.
P. M. Maines	Princeton, Iowa.
P. H. Martin	Princeton, Iowa.
Geo. O. Lancaster	Princeton, Iowa.

Henry Horton---------- LeClaire, Iowa.
Thomas Doughty---------- LeClaire, Iowa.
E. P. Bartlett---------- LeClaire, Iowa.
J. L. Carver---------- LeClaire, Iowa.
Enock Davies---------- LeClaire, Iowa.
Chas. Burrell---------- LeClaire, Iowa.
George Carroll---------- LeClaire, Iowa.
John Van Alstine---------- LeClaire, Iowa.
Charles Follett---------- LeClaire, Iowa.
Robert Shannon---------- LeClaire, Iowa.
David Nugent---------- LeClaire, Iowa.
Hugh Shannon---------- LeClaire, Iowa.
Peter Quinn---------- LeClaire, Iowa.
James Stedman---------- LeClaire, Iowa.
T. F. Long---------- LeClaire, Iowa.
F. E. Goldsmith---------- LeClaire, Iowa.
Daniel Dawley---------- LeClaire, Iowa.
Joe Manwaring---------- LeClaire, Iowa.
George Galloway---------- Davenport, Iowa.
Wm. B. Milligan---------- Davenport, Iowa.
Charles O'Hara---------- Davenport, Iowa.
Wm. Burns---------- Davenport, Iowa.
Wm. Adamson---------- Davenport, Iowa.
Edward Bergen---------- Davenport, Iowa.
Robert Solomon---------- Davenport, Iowa.
T. G. Isherwood---------- Davenport, Iowa.
D. R. Hanley---------- Davenport, Iowa.
Wilbur Norris---------- Rock Island, Illinois.
George Haikes---------- Rock Island, Illinois.
Ben Wilson---------- Rock Island, Illinois.
Spencer Burtnett---------- Rock Island, Illinois.
Peter Servus---------- Rock Island, Illinois.
John Bromley---------- Rock Island, Illinois.
George Longwell---------- Rock Island, Illinois.
Chas. Chaplin---------- Muscatine, Iowa.
Robert Carter---------- Muscatine, Iowa.
John Baer---------- Muscatine, Iowa.
Wm. Fisher---------- Muscatine, Iowa.
James Burgess---------- Burlington, Iowa.
Zach Morgan---------- Burlington, Iowa.

THE LAST RAFT

Captain W. L. Hunter with steamer Ottumwa Belle, 1915, Hudson, Wis., to Fort Madison, Iowa

Sam Evans---------- St. Louis, Missouri.
Chas. Evans---------- St. Louis, Missouri.
Thos. C. Chambers---------- Fort Madison, Iowa.
Thos. Wright---------- Fort Madison, Iowa.
John Wright---------- Fort Madison, Iowa.
Chas. Henderson---------- Fort Madison, Iowa.
Frank O'Kell---------- Fort Madison, Iowa.
Samuel Nimrich---------- Nauvoo, Illinois.
Dee Patton---------- Montrose, Iowa.
Henry Gerboth---------- Montrose, Iowa.
F. A. Whitney---------- Keokuk, Iowa.
Wm. Schoels---------- Keokuk, Iowa.
Sam Critchfield---------- Canton, Missouri.
Thomas Burtnett---------- LaGrange, Missouri.
S. T. Burtnett---------- Quincy, Illinois.
Wm. Dodge---------- Dubuque, Iowa.
M. L. Hanley---------- Dubuque, Iowa.
Bud Dolson---------- Dubuque, Iowa.
Lyman Stewart---------- Bellevue, Iowa.
Jas. L. Sherman---------- Cassville, Wisconsin.
George Sherman---------- Cassville, Wisconsin.
Chas. Harvey---------- Guttenberg, Iowa
Wm. Glynn---------- Lansing, Iowa.
Chas. Fest---------- Lansing, Iowa.
Lon Ames---------- Lansing, Iowa.
Chas. Voight---------- Lansing, Iowa.
Frank Dillon---------- LaCrosse, Wisconsin.
Chas. Dillon---------- LaCrosse, Wisconsin.
David Wescott---------- LaCrosse, Wisconsin.
Levi King---------- LaCrosse, Wisconsin.
Manny King---------- LaCrosse, Wisconsin.
George Dansbury---------- LaCrosse, Wisconsin.
Henry Tully---------- LaCrosse, Wisconsin.
James Tully---------- LaCrosse, Wisconsin.
Frank Utter---------- Trempaleau, Wisconsin.
Edward Hollinshead---------- Trempaleau, Wisconsin.
Wm. McCraney---------- Winona, Minnesota.
Elmer McCraney---------- Winona, Minnesota.
Tyler Roe---------- Winona, Minnesota.
Herman Anding---------- Winona, Minnesota.

James Fearn---------- Winona, Minnesota.
Pearl Roundy---------- Wabasha, Minnesota.
Oren Roundy---------- Wabasha, Minnesota.
John Wiley---------- Wabasha, Minnesota.
Milton Roundy---------- Wabasha, Minnesota.
Robert Roundy ---------- Wabasha, Minnesota.
Thos. DeCamp---------- Wabasha, Minnesota.
Sol. Fuller---------- Stillwater, Minnesota.
Sam Walker---------- Stillwater, Minnesota.
Joseph Fuller---------- Stillwater, Minnesota.
Thos. Slade---------- Stillwater, Minnesota.
Gus. Bailes---------- Stillwater, Minnesota.
Alvin Fuller---------- Stillwater, Minnesota.
Milton Fuller---------- Stillwater, Minnesota.
Alex Campbell---------- Stillwater, Minnesota.
A. H. Bryan---------- Stillwater, Minnesota.
B. L. Hanks---------- Stillwater, Minnesota.
A. R. Young---------- Stillwater, Minnesota.
Jesse Young---------- Stillwater, Minnesota.
Hub. Young---------- Stillwater, Minnesota.
Wm. Feis---------- Stillwater, Minnesota.
Thos. Scullum---------- Stillwater, Minnesota.
Sam Fowler---------- Stillwater, Minnesota.
Mart. Dustin---------- Stillwater, Minnesota.
Bert Davis---------- Stillwater, Minnesota.
John Pickety---------- Stillwater, Minnesota.
George Wilcox---------- Stillwater, Minnesota.
James McGuire---------- Stillwater, Minnesota.
L. B. Culbertson---------- Stillwater, Minnesota.
Fred Mack---------- Stillwater, Minnesota.
John Beard---------- Stillwater, Minnesota.
Chas. Fisher---------- Stillwater, Minnesota.
Oliver Murray---------- Stillwater, Minnesota.
Chas. Teel---------- Prescott, Wisconsin.
James Miller---------- Prescott, Wisconsin.
Oliver Stokes---------- Reads Landing, Minnesota.
Edward Stokes---------- Reads Landing, Minnesota.
George Bee---------- Reads Landing, Minnesota.
Marion Davison---------- Reads Landing, Minnesota.
John Walker---------- Reads Landing, Minnesota.

Edward Huttelby.....Reads Landing, Minnesota.
Wm. Gibson.....Reads Landing, Minnesota.
James Smith.....Reads Landing, Minnesota.
Lem Maxfield.....Moline, Illinois.
M. H. Newcomb.....Pepin, Wisconsin.
A. L. Mussey.....Pepin, Wisconsin.
J. W. Perry.....Pepin, Wisconsin.
John Fuller.....Pepin, Wisconsin.
O. G. Potter.....Pepin, Wisconsin.
A. C. Fairweather.....Pepin, Wisconsin.
G. W. Hunter.....Pepin, Wisconsin.
Wm. Ecklor.....Pepin, Wisconsin.
Alfred Fuller.....Pepin, Wisconsin.
George Gray.....Pepin, Wisconsin.
Eugene Fuller.....Pepin, Wisconsin.
Hiram Fuller.....Pepin, Wisconsin.
Clair Fuller.....Pepin, Wisconsin.
S. E. Serene.....Pepin, Wisconsin.
Earl Steele.....Pepin, Wisconsin.
James H. Harris.....Saint Louis, Missouri.

Raft-boat Mates

Many of those who were mates on the earlier raft boats picked up the river and got so they could stand a watch day or night going up river and were able to get a pilot's license. It was harder to get even a little practice running a raft down stream, but a few of them did become regular raft pilots and are in that list.

Among those who distinguished themselves as mates and were known as good ones, I recall:

John Suiter, now captain and pilot of the "LeClaire."
James Lyons, now in poultry farming, Albany, Illinois.
Del Shaw, now living in Princeton, Iowa.
C. W. Schricker, now living in Davenport, Iowa.
Peter Reese, living at Victory, Wisconsin.
Edward Johnson, living in Rock Island, Illinois.
Louis Freneau, living in Rock Island, Illinois.
John McMahon, of Clinton, Iowa.
Herman Johnson, of Winona.
George Budde, of Winona.
John McCarty, of Galena.
Joe LaReveire, of Wabasha.
Chas. Rook, of Princeton.
Thos. Maley, of LeClaire.
Thos. Kennedy, of LeClaire.
Henry Tweisel, of LeClaire.
Henry Massman, of LeClaire.
John Bailey, of LeClaire.
John Elliott, of LeClaire.
James Shannon, of LeClaire.
George Senthouse, of LeClaire.
Wm. Babatz, of Albany.
Louis Babatz, of Albany.

Albert Babatz, of Albany.
Don Buckingham, of LaCrosse.
Wm. Kerrigan, of Rock Island.
Harry Adamson, of Rock Island.
John Lund, living in Clinton and in service as master and pilot of the steamer "Artemus Gates" in sand and gravel business.
Wm. Boldt, living in Davenport, retired.

James Shannon was my mate on the "Last Chance," my first command. I have never seen a brighter, keener, tougher, healthier man in all these years. He took an interest and a pride in his work and always had a good job.

I have great consideration for a good mate. He has the care of the steamboat; to see that she is kept clean and trim, and also that fuel is supplied regularly to the firemen.

He must take good care of his entire kit for the raft and have it all overhauled every trip going up river. He must get the raft in good shape to start with and then get his crew out frequently to change and tighten up the lines to keep her straight.

Then to split for bridges in the night and to couple up and move the boat over quickly and without any hitch requires skill and management, where holding the wrong line or letting go the wrong one or the right one too soon means trouble and delay.

Then he must exercise great tact in handling his crew, maintaining control and fair discipline, while sustaining his reputation for being "square" and a "good fellow."

Output of Logs from different Streams into the Mississippi, compiled from records in the office of the Surveyor-general of Logs and Lumber at Saint Paul, Minnesota, and from the Archives of the State Historical Societies of Minnesota and Wisconsin

From Saint Croix river into the lake, 1837-1903	11,285,835,720 feet
Brought in by railroads into the lake, 1837-1903	158,446,000 feet
By rail and river (estimated) into the lake, 1904-1915	1,000,000,000 feet
Total in rafts from Lake Saint Croix, 1837-1915	12,444,281,720 feet
From the Mississippi above the Falls (estimated), 1850-1870	150,000,000 feet
From the Mississippi above the Falls (estimated), 1888-1916	1,559,062,520 feet
Total through the Saint Paul boom, 1850-1916	1,709,062,520 feet
From the Chippewa river:	
Through the Beef Slough booms, 1867-1889	5,301,019,170 feet
Through West Newton Slough boom, 1889-1896	3,064,856,760 feet
Through West Newton Slough boom (estimated), 1897-1905	3,000,000,000 feet
Total logs from the Chippewa, 1867-1905	11,365,875,930 feet

Total lumber from the Chippewa (estimated), 1830-1901	14,000,000,000 feet
Grand Total from the Chippewa, 1830-1905	25,365,875,930 feet
From Black river through Onalaska boom, 1855-1897	4,920,811,340 feet
Estimate for logs before and after recording	250,000,000 feet
Total logs from Black river	5,170,000,000 feet
Total logs and lumber from Wisconsin river	2,285,000,000 feet

RECAPITULATION

From the Saint Croix river and lake	12,444,281,720 feet
From the Mississippi above the Falls	1,709,062,520 feet
From the Chippewa river	25,365,875,930 feet
From the Black river	5,170,000,000 feet
From the Wisconsin river	2,285,000,000 feet
Grand total rafted down river	46,974,220,170 feet
Value at $15.00 per thousand feet	$704,613,300.00

One cannot contemplate this vast amount of building material so admirably suited for houses, barns, and fences, in the prairie states, without recognizing the wisdom of the Great Creator in providing the extensive forests at the headwaters of the Mississippi and its northern tributaries on whose waters it could be floated down at so little expense.

The logs were brought down the Chippewa loose for seventy-five cents per thousand feet and the usual price for towing them in rafts from Beef Slough or West Newton to Davenport or Rock Island was one dollar and ten cents per thousand feet, or about one dollar per ton on the lumber cut from them for the entire trip from the woods in northern Wisconsin to the mill or yard in the tri-cities. Cheap transportation on a great commodity that was so essential in development of Illinois, Iowa, Missouri, Kansas and Nebraska, and lasted

until we learned to make and use cement and could afford to buy more expensive lumber from the south or northwest on which the rail charges are higher than the cost of the lumber put on the cars.

Logging out of the Wisconsin river ended about 1876.
Logging out of the Black river ended in 1897.
Logging out of the Chippewa river ended in 1905.
Logging out of the Saint Croix river ended in 1914.
Logging out of the Saint Paul boom ended in 1916.

The Last Log

"There is a picture hanging in the *Gazette Office*, showing the old boom-master, Frank McGray, hitching the last log that came through the Saint Croix boom; the log was a large one, scaling, I should say, five hundred or six hundred feet and this closed operations at the boom for all time; that was on the twelfth day of June, 1914; on this day also, the last meal was served in the old cook house and among those that sat down to dinner that day were Mr. McGray, James R. Brennan, then the boom master, D. J. McCuish, Eugene O'Neal, Rev. John McCoy, then pastor of the First Presbyterian Church, R. S. Davis, W. C. Masterman and several others, whose names escape me at this writing." — Stillwater *Gazette*, April 2, 1928.

There has been much discussion as to when rafting ceased at West Newton where the M. R. L. Company handled the great output of logs from the Chippewa.

I could not harmonize the positive but conflicting statements of numerous persons to whom I appealed for information and was greatly pleased when I finally got a letter from Mr. Andrew Thompson of Nelson, Wisconsin, which closed the discussion.

Mr. Thompson had been a foreman at West Newton

until Mr. Edward Douglas, the superintendent, left for the west in 1904, when he took charge of the job until the final wind up.

Mr. Thompson writes under date of January 13, 1929, that no logs were put past Chippewa falls after 1904; that in autumn of that year (1904) they splashed and drove everything in the river and had teams haul in from the bottoms and clear the islands and sloughs.

In this way they had thirty million feet to raft out in 1905 and the last full raft was taken by one of Weyerhaeuser and Denkmann's boats late in July or August first.

Some logs had broken away or got loose from number one and with a small crew he caught most of them in Fisher Slough and fitted them up so they could be taken to Winona.

Then they pulled the piling and rafted it and some of the booms. These and the picked up logs were taken to Laird and Norton's mill at Winona by the steamer "Frontenac" in August. The chains, wire, and wood were also sold in Winona. The buildings and their contents were sold to people living near, in 1905.

The steamer "E. Douglas" and the pile drivers were sold in 1906, and there was nothing left to indicate the activities of the company that had turned out as high as six hundred million feet of logs in one season, sorted, scaled and rafted up in good shape ready for boats to hitch into and take down river. 1904 was the last full season at West Newton. 1905 – 30,000,000 feet was the output at West Newton, and the clean-up of logs, piles and booms.

APPENDIX I

List of Raft-boats, their Masters and Owners, 1883

NAME	MASTERS
Charlotte Boeckeler	Robert Dodds
Helene Shulenburg	E. J. Chacey
owned by the Shulenburg and Boeckeler Lumber Company of Saint Louis, Missouri.	
Helen Mar	W. R. Slocumb
Louisville	Andrew Larkin
Menominie	Stephen Withrow
Bart. E. Linehan	Lafe Parker
owned by the Knapp, Stout and Company of Saint Louis, Missouri.	
J. G. Chapman	John O'Connor
owned by Peter Kirns of Saint Louis, Missouri.	
Tiber	William Kratka
owned by the Quincy Lumber Company of Quincy, Illinois.	
Lumberman	Hiram Brazee
owned by J. C. Daniels of Keokuk, Iowa.	
Prescott	R. S. Owen
owned by Sam Speak and R. S. Owen of Montrose, Iowa.	
Sam Atlee	James Hugunin
owned by S. & J. C. Atlee of Fort Madison, Iowa.	
D. C. Fogel	Fred Fogel
owned by Fogel Brothers of Burlington, Iowa.	
Kit Carson	A. R. Young
owned by A. R. Young and the Burlington Lumber Company.	

NAME	MASTERS
Isaac Staples	Vincent Peel
owned by Vincent Peel and the Burlington Lumber Company.	
B. Hershey	Cyprian Buisson
owned by the Hershey Lumber Company of Muscatine.	
Silver Wave	John McKenzie
Jas. Fisk, Jr.	Thomas Dolson
LeClaire Belle	I. H. Short
owned by the Van Sant and Musser Transportation Company of Muscatine, Iowa.	
F. C. A. Denkmann	W. H. Whisler
C. J. Caffrey	George Carpenter
owned by Weyerhaeuser and Denkmann of Rock Island, Illinois.	
Stillwater	Alfred Carpenter
owned by the Rock Island Lumber Company.	
Eclipse	E. J. Lancaster
owned by Lindsay and Phelps and the Cable Lumber Company of Davenport, Iowa.	
St. Croix	George Tromley, Jr.
owned by the Mueller Lumber Company of Davenport.	
Golden Gate	George Rutherford
owned by the Coleman and Rutherford Steamboat Company of Davenport, Iowa.	
Moline	Isaiah Wasson
owned by Dimock, Gould and Company of Moline, Illinois.	
J. S. Keator	L. A. Day
owned by the Keator Lumber Company of Moline, Illinois.	
Last Chance	John Monroe
J. W. Mills	W. A. Blair
owned by the LeClaire Navigation Company of LeClaire, Iowa.	
Pilot	John McCaffrey
owned by D. F. Dorrance and John McCaffrey of LeClaire, Iowa.	

NAME	MASTERS
Ten Broeck	George Tromley, Jr.
owned by John McCaffrey and George Tromley, Jr., of LeClaire and Robert Dodds of Saint Louis, Missouri.	
W. J. Young, Jr.	Paul Kerz
D. Boardman	James Rellis
owned by W. J. Young and Company of Clinton, Iowa.	
Artemus Lamb	Stephen B. Hanks
Chancy Lamb	William J. Savage
Lafayette Lamb	Cyrus King
Lady Grace	Toliver McDonald
owned by C. Lamb and Sons of Clinton, Iowa.	
Silver Crescent	O. P. McMann
owned by O. P. McMann of Clinton, Iowa.	
Netta Durant	A. E. Duncan
owned by the Clinton Lumber Company of Clinton and A. E. Duncan of Lyons, Iowa.	
Nina	Horace Hollinshead
owned by the Lyons Lumber Company and H. Hollinshead.	
Pauline	Alfred Hollinshead
Lily Turner	J. M. Turner
owned by Turner and Hollinshead of Lansing, Iowa.	
Iowa	Frank Wild
owned by Davis and Gardner of Lyons, Iowa.	
Gardie Eastman	Joseph Buisson
owned by Gardner, Batcheler and Welles, Lyons, Iowa.	
Nellie	Thomas O'Rourke
owned by Specht Brothers of Spechts Ferry.	
C. W. Cowles	George Winans
owned by W. and J. Fleming of McGregor.	
Abner Gile	J. E. Short
owned by Captain Short and Abner Gile of LaCrosse.	
Mountain Belle	Morrell Looney
Dexter	Peter O'Rourke
Bella Mac	R. M. Cassidy
Natrona	Vol. A. Biglow

NAME	MASTERS
Mollie Mohler	N. B. Lucas
Zada	Frank Wetenhall
Carrie	
owned by McDonald Brothers of LaCrosse, Wisconsin.	
Dan Hine	G. L. Short
B. F. Weaver	
Alfred Toll	
Flying Eagle	A. M. Short
owned by P. S. Davidson of LaCrosse, Wisconsin.	
A. Reiling	A. J. Davis
owned by A. J. Davis and the Standard Lumber Company of Dubuque, Iowa.	
City of Winona	William McCraney
owned by Youmans Brothers and Hodgins of Winona, Minnesota.	
Julia	William Slocumb
owned by Laird Norton and Company, Winona, Minnesota.	
Hartford	Henry Buisson
owned by the Mississippi River Logging Company of Clinton, Iowa.	
Jessie Bill	E. C. Bill
Buckeye	
owned by Captain E. C. Bill of Wabasha, Minnesota.	
Lizzie Gardner	Asa Woodward
owned by M. E. Drury of Wabasha, Minnesota.	
Silas Wright	John Walker
owned by Davison and Walker of Reads Landing.	
Clyde	E. D. Dickson
owned by the Empire Lumber Company of Eau Claire, Wisconsin.	
Wm. White	C. H. Meade
owned by Captain Meade of Stillwater, Minnesota.	
Ida Fulton	Irvine Miliron
owned by Meade and Gillespie of Stillwater.	

NAME	MASTERS
Ruby	George Herold
owned by Gardner and Company.	
Bro. Jonathan	C. C. Carpenter
A. T. Jenks	O. J. Newcomb
R. J. Wheeler	Ira Fuller
Dispatch	W. Grant
owned by Durant Wheeler and Company of Stillwater.	
David Bronson	John Hoy
Evansville	Edward Root
Bun Hersey	John Quinlan
owned by Matt Clark Transportation Company of Stillwater, Minnesota.	
Perry Swain	
owned by D. M. Swain of Stillwater.	
Penn Wright	H. L. Peavey
owned by H. L. Peavey of Stillwater, Minnesota.	

In addition to the raft-boats listed above that were regularly engaged in towing logs or lumber rafts to the down-river yards and mills, there were a few small boats doing harbor work and assisting the large boats at some particular places, the "Frank" at LaCrosse, the "Little Hoddie" in Beef Slough, the "Belle of Bellvue" at Minneiska, the "Bob Burdette" at Stillwater and the "Phil Schaeckel" at Reads and the "Lotus" at Winona.

The "Jim Watson" is not included, as she was seized by the United States Marshal for debt and her ownership and future sphere of operations are much in doubt.

The list includes seventy-nine regular raft-boats and six "helpers," making eighty-five in all.

As there were twenty men in an average crew, these eighty-five steamboats gave employment to about two thousand men, counting those actually on board and

the "alternates" on shore, some sick at home or in the marine hospital, others laying off a trip to rest up or to spend their few hard earned dollars, like an Irishman whose name I can't recall, who gave me notice going up river one trip on the "Ten Broeck" that he would like his money as he intended to leave us when we landed at Lansing for supplies.

He had been with us three or four weeks in the mate's crew on deck. He was above the average for intelligence. He had read some good books and often gave the others a few lines from Shakespeare appropriate to the occasion, and in very impressive manner.

I did not want him to get off and on my insisting as to "why" he was leaving us, he told me he had already overstayed his time and must go ashore to rest and refresh himself.

As I passed back through the deck room I glanced at his big black pasteboard valise. He noticed this and on my return through the deck room he called my attention to his worldly belonging and with excellent voice and appropriate gesture said: "Captain! Behold her! The accumulations of forty-one years."

His possessions included a red handkerchief, an old razor and a pair of socks.

APPENDIX II

List of Raft-boats in Commission, 1890, with names of their Masters and Owners, as published in the Davenport Democrat, February, 1890

Name	Masters
Helene Shulenburg	E. J. Chacey
Charlotte Boeckeler	Robert Dodds
Robert Dodds	George Brasser
owned by the Shulenburg and Boeckeler Lumber Company of Saint Louis, Missouri.	
Abner Gile	John H. Wooders
owned by the Canton Sawmill of Canton, Missouri.	
Lumberman	Gara Denberg
owned by John C. Daniels of Keokuk, Iowa.	
Park Bluff	Thomas Peel
Prescott	R. S. Owen
owned by Des Moines Towing Company of Montrose, Iowa.	
Sam Atlee	Asa Woodward
J. C. Atlee	William Enderle
owned by S. and J. C. Atlee of Fort Madison, Iowa.	
B. Hershey	Cyprian Buisson
owned by The Hershey Lumber Company of Muscatine, Iowa.	
Musser	Thos. Dolson
LeClaire Belle	John O'Connor
J. W. Van Sant	George Tromley, Jr.
owned by Van Sant and Musser Transportation Company of Muscatine, Iowa.	

NAME	MASTERS
C. J. Caffrey	George Carpenter
F. C. A. Denkmann	William H. Whisler
owned by Weyerhaeuser and Denkmann of Rock Island, Illinois.	
Stillwater	Jas. Hugunin
owned by the Rock Island Lumber Company.	
Golden Gate	James Coleman
owned by Coleman Brothers of Davenport, Iowa.	
J. K. Graves	John Hugunin
owned by Frederick Weyerhaeuser of Rock Island, Illinois.	
Eclipse	E. J. Lancaster
owned by Eclipse Transportation Company of Davenport.	
J. S. Keator	L. A. Day
owned by J. S. Keator and Sons, Moline, Illinois.	
Moline	Isaiah Wasson
owned by Dimock, Gould and Company, Moline, Illinois.	
Irene D.	D. F. Dorrance
owned by D. F. and Dana Dorrance and M. L. Hanley of LeClaire, Iowa.	
West Rambo	J. W. Rambo
owned by the Upper Rapids Transportation Company of LeClaire, Iowa.	
Jo. Long	J. N. Long
owned by John McCaffrey and J. N. Long of LeClaire.	
J. W. Mills	J. H. Laycock
owned by W. A. Blair of Davenport and J. H. Laycock of LeClaire, Iowa.	
Evansville	Thomas Withrow
Ten Broeck	W. A. Blair
Netta Durant	George Rutherford
owned by the LeClaire Navigation Company of LeClaire.	
Pilot	Orrin Smith
owned by the Pilot Steamboat Company of LeClaire.	
Everett	Durbin Dorrance
owned by Durbin Dorrance of LeClaire.	

NAME	MASTERS
Reindeer	Alfred Hollinshead
owned by Al. Hollinshead and D. C. Law, Lyons, Iowa.	
Artemus Lamb	Wm. McCaffrey
Chancy Lamb	Joseph Duley
Lafayette Lamb	John Monroe
Lady Grace	Cyrus King
owned by C. Lamb and Sons of Clinton, Iowa.	
D. Boardman	I. M. Newcomb
W. J. Young, Jr.	Paul Kerz
owned by W. J. Young and Company of Clinton, Iowa.	
Silver Crescent	W. S. Mitchell
owned by LeClaire Navigation Company, Van Sant and Musser Transportation Company and W. S. Mitchell of Clinton, Iowa.	
Nina	Hiram Brazee
owned by Ida S. Lachmund, George W. Ashton and Lyons Lumber Company.	
Bro. Jonathan	George Reed
owned by Lachmund, George W. Ashton and Geo. S. Sardam of Fulton, Illinois.	
Lily Turner	C. C. Carpenter
owned by Edward Hollinshead, Ida S. Lachmund and Geo. W. Ashton of Lyons, Iowa.	
Gardie Eastman	J. G. Moore
owned by Gardiner Batchelder and Welles of Lyons, Iowa.	
Iowa	R. H. Tromley
owned by Silas Gardiner and Harry Wilkinson of Lyons, Iowa.	
Clyde	M. M. Looney
owned by the Standard Lumber Company of Dubuque, Iowa.	
Jennie Hayes	William Davis
owned by S. E. Hallam and William Davis of Dubuque, Iowa.	
Pauline	J. M. Turner
owned by J. M. Turner.	

NAME	MASTERS
Lizzie Gardner	Wm. Kratka
owned by Sawyer and Austin of LaCrosse, Wisconsin.	
Mountain Belle	Henry Walker
Inverness	A. P. Lambert
Bella Mac	E. D. Dickson
Thistle	N. B. Lucas
Louisville	R. M. Cassidy
Helen Mar	William Dobler
B. E. Linehan	W. R. Slocumb
Kit Carson	I. H. Short
Scotia	Charles White
owned by McDonald Brothers of LaCrosse, Wisconsin.	
Dan Thayer	A. M. Short
Dan Hine	(No Assignment)
owned by P. S. Davidson of LaCrosse, Wisconsin.	
Natrona	Vol. A. Biglow
owned by Vol. A. Biglow of LaCrosse, Wisconsin.	
Alfred Toll	G. L. Short
owned by G. L. Short and Vol. A. Biglow of LaCrosse.	
Glenmont	S. B. Withrow
Juniata	Henry Slocumb
Julia	(Unassigned)
owned by Laird Norton and Company of Winona, Minnesota.	
City of Winona	O. J. Newcomb
owned by Youmans Brothers and Hodgins of Winona.	
C. W. Cowles	Jos. Buisson
owned by the Valley Navigation Company of Wabasha, Minnesota.	
Luella	Antoine Roque
J. G. Chapman	Ira DeCamp
owned by C. Jellison Towing Company of Wabasha, Minnesota.	
Lion	James Follmer
owned by H. C. Wilcox of Wabasha, Minnesota.	

NAME	MASTERS
Silas Wright	Daniel Davison
owned by Daniel Davison.	
Phil Schaeckel	Phil Schaeckel
owned by Knapp, Stout and Company of Reads Landing.	
R. J. Wheeler	(Unassigned)
Daisy	Ira Fuller
Henrietta	Thomas Hoy
owned by Durant Wheeler and Company of Stillwater, Minnesota.	
Isaac Staples	C. B. Romahn
Menominie	I. H. Miliron
owned by Bronson and Folsom of Stillwater, Minnesota.	
Ravenna	John Hoy
owned by Anderson and O'Brien of Stillwater, Minnesota.	
Sea Wing	Henry Fuller
owned by David Wethern of Diamond Bluff, Wisconsin.	
St. Croix	Jos. Young
owned by Herbert O'Donnell, Dubuque, Iowa.	
Nellie	William York
owned by William Davis of Dubuque, Iowa.	

APPENDIX III

List of Raft-boats from Davenport Democrat February, 1893

This is the last authentic list the author can find. It shows numerous changes from the list of 1890

NAME	MASTERS
Eclipse	E. J. Lancaster
owned by Eclipse Transportation Company of Davenport.	
F. C. A. Denkmann	O. E. McGinley
E. Rutledge	W. H. Whisler
F. Weyerhaeuser	John Hugunin
J. K. Graves	Harry Hugunin
owned by Weyerhaeuser and Denkmann of Rock Island.	
Kit Carson	Gara Denberg
Lumberman	J. H. Wooders
owned by J. C. Daniels of Keokuk, Iowa.	
Moline	Isaiah Wasson
owned by Dimock, Gould and Company of Moline.	
J. S. Keator	
owned by J. S. Keator and Sons, Moline.	
Pilot	Orrin Smith
owned by Pilot Steamboat Company of LeClaire.	
Jo. Long	S. E. Lancaster
owned by Jo. Long Transportation Company of LeClaire.	
Irene D.	D. F. Dorrance
owned by Union Towing Company of LeClaire.	
Ten Broeck	W. S. Mitchell
Iowa	George Carpenter
Netta Durant	George Rutherford

NAME	MASTERS
Volunteer	John Rook
owned by the LeClaire Navigation Company.	
West Rambo	Jos. Young
owned by the Upper Rapids Transportation Company of LeClaire.	
J. W. Mills	J. H. Laycock
owned by W. A. Blair and J. H. Laycock of LeClaire.	
Gardie Eastman	George Reed
Reindeer	T. C. Withrow
Lily Turner	H. Hollinshead
owned by the Mississippi Towing Company of Lyons.	
Nina	John Pearson
owned by Lowell Sterling and Ida S. Lachmund, Lyons.	
Lady Grace	J. G. Moore
Artemus Lamb	Thomas Duncan
Chancy Lamb	Abe Mitchell
owned by C. Lamb and Sons of Clinton, Iowa.	
D. Boardman	I. M. Newcomb
W. J. Young, Jr.	Paul Kerz
owned by W. J. Young and Company of Clinton, Iowa.	
Sam Atlee	Asa Woodward
owned by S. & J. C. Atlee of Fort Madison, Iowa.	
Musser	S. B. Withrow
J. W. Van Sant	Geo. R. Carpenter
Glenmont	John O'Connor
owned by the Van Sant and Musser Transportation Company, Muscatine.	
Charlotte Boeckeler	Robert Dodds
Helene Shulenburg	George Brasser
owned by Shulenburg and Boeckeler Lumber Company of Saint Louis.	
Henrietta Cyclone R. J. Wheeler	No assignments of Masters
owned by Durant and Wheeler of Stillwater, Minnesota.	

Name	Masters
Saturn	George Winans
owned by George Winans.	
Daisy	John Hoy
owned by Musser-Sauntry Company, Stillwater.	
Clyde	M. M. Looney
Isaac Staples	C. B. Romahn
Ravenna	C. H. Davison
Menominie	E. D. Dickson
owned by Bronson and Folsom of Stillwater.	
J. G. Chapman	Ira DeCamp
Luella	J. S. Walker
owned by C. Jellison Towing Company of Wabasha.	
B. Hershey	Cyprian Buisson
C. W. Cowles	Joseph Buisson
Lafayette Lamb	J. E. Kaiser
owned by the Valley Navigation Company of Wabasha.	
Lion of Wabasha	H. C. Wilcox
owned by H. C. Wilcox.	
Vernie Mac	Wm. Weir
owned by D. J. McKenzie of Alma, Wisconsin.	
City of Winona	O. J. Newcomb
owned by Youmans Brothers and Hodgins, Winona.	
Juniata	Henry Slocumb
owned by Laird, Norton and Company, Winona.	
Bella Mac	N. B. Lucas
Mountain Belle	A. P. Lambert
Louisville	L. A. Day
B. E. Linehan	Wm. Dobler
Helen Mar	(No Assignment)
owned by LaCrosse Mississippi Towing Company, LaCrosse.	
Dan Thayer	A. M. Short
owned by P. S. Davidson Lumber Company, LaCrosse.	
Jessie	L. Darling
Quickstep	A. Gallager
owned by Vol. A. Biglow of LaCrosse.	

NAME	MASTERS
Abner Gile	Brown Jenks
owned by J. B. Jenks and Vol. A. Biglow of LaCrosse.	
Lizzie Gardner	Wm. Kratka
Pauline	Hiram Brazee
Thistle	George Tromley, Jr.
owned by the Kratka Towing Company of Lansing, Iowa.	

From the foregoing list we learn of many changes in ownership. The old firm of McDonald Brothers of LaCrosse that had enjoyed many years of prosperity, became embarrassed and had to be reorganized during the winter of 1892 and 1893, and the old firm name appears no more. In its place we have the LaCrosse Mississippi Towing Company with their fleet cut down to four boats in commission. The "Helen Mar" did not do any more rafting.

Also the old and prosperous firm of Durant, Wheeler and Company only has three boats left and no captain hired for the "R. J. Wheeler" and they soon afterward sold her to Captain Will Davis and A. S. Merriam to run lumber to Quincy.

The rafting industry had reached its peak and was starting on its decline to wind up for good in August, 1915, when Captain W. L. Hunter with the steamer "Ottumwa Belle" on the stern and the "Pathfinder" on the bow and the "J. M." in tow ran the last raft.

40
Old Home and Statue of Mark Twain

MAP OF

THE MISSISSIPPI

AND ITS TRIBUTARIES

Especially prepared by Max Mayer

to illustrate

BLAIR'S "A RAFT PILOT'S LOG"

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SCALE OF STATUTE MILES

0 10 20 30 40 50 75 100

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